GenCore version 4.5

OM protein - protein search, using sw model

Run on: May 29, 2001, 13:53:04 ; Search time 31.29 Seconds
(without alignments)
129.709 Million cell updates/sec

Title: US-09-537-859-3
Perfect score: 382
Sequence: 1 SIPITCCFNVINRKIPIQRL.....ERWVRDSMKHLDQIFQNLKP 71

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 390729 seqs, 57163235 residues

T[redacted] number of hits satisfying chosen parameters: 390729

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : A_Geneseq_0401:*
1: /SIDS6/gcgdata/geneseq/geneseqp/AA1980.DAT:*
2: /SIDS6/gcgdata/geneseq/geneseqp/AA1981.DAT:*
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11: /SIDS6/gcgdata/geneseq/geneseqp/AA1990.DAT:*
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21: /SIDS6/gcgdata/geneseq/geneseqp/AA2000.DAT:*
22: /SIDS6/gcgdata/geneseq/geneseqp/AA2001.DAT:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	382	100.0	71	20	Y07234	Truncated monocyte
2	382	100.0	71	20	Y07238	Truncated monocyte
3	382	100.0	76	21	Y69031	Amino acid sequenc
4	382	100.0	77	21	B15786	Human chemokine MC
5	382	100.0	99	20	Y05300	C-C chemokine, MCP
6	382	100.0	99	20	Y07233	Wild type monocyte
7	382	100.0	99	20	Y07237	Wild type monocyte
8	382	100.0	109	19	W42072	Human MC proprotei
9	378	99.0	109	18	W26655	Human beta-chemoki
10	359	94.0	77	20	Y14223	Chemokine hMCP2.
11	344	90.1	72	16	R70804	Chemoattractant MC
12	267	69.9	74	21	Y69023	Amino acid sequenc
13	267	69.9	97	17	W00667	Pancreas expressed
14	267	69.9	97	18	W14990	Human eosinocyte C
15	267	69.9	97	18	W10099	Human eotaxin. Ho
16	267	69.9	97	21	B15794	Human chemokine eo
17	267	69.9	323	21	Y69058	A chemokine recept
18	267	69.9	325	21	Y69059	A chemokine recept
19	267	69.9	330	21	Y69060	A chemokine recept
20	246	64.4	69	18	W13596	Monocyte chemoattr
21	246	64.4	76	10	P90292	Peptide from human
22	246	64.4	76	13	R28660	MCF. Synthetic.
23	246	64.4	76	16	R87680	Monocyte chemotact
24	246	64.4	76	16	R87677	(3-Ala) MCP-1. Ho
25	246	64.4	76	17	W09374	Monocyte chemotact
26	246	64.4	76	18	W11131	Mature human monoc
27	246	64.4	76	19	W40175	Macrophage chemoat
28	246	64.4	76	21	B12818	Human glioma cell
29	246	64.4	76	21	Y69030	Amino acid sequenc
30	246	64.4	77	16	R86859	Mature MCP-1. Hom
31	246	64.4	99	10	P95387	Human monocyte che
32	246	64.4	99	13	R28663	MCF. Synthetic.
33	246	64.4	99	16	R73914	Human monocyte che
34	246	64.4	99	16	R70800	Chemoattractant pr
35	246	64.4	99	19	W40174	Macrophage chemoat
36	246	64.4	99	20	Y48391	Human prostate can
37	246	64.4	99	20	Y26176	Monocyte chemoattr
38	246	64.4	99	21	B15785	Human chemokine MC
39	246	64.4	325	21	Y69049	A chemokine recept
40	246	64.4	327	21	Y69050	A chemokine recept
41	246	64.4	332	21	Y69051	A chemokine recept
42	242	63.4	99	11	R06398	Human MCF precurso
43	239	62.6	68	18	W13597	Monocyte chemoattr
44	239	62.6	69	16	R87678	des(2-8) MCP-1. H
45	238	62.3	76	16	R87676	(24-Arg) MCP-1. H

ALIGNMENTS

RESULT 1
Y07234
ID Y07234 standard; protein; 71 AA.
XX
AC Y07234;
XX
DT 06-JUL-1999 (first entry)
XX
DE Truncated monocyte chemotactic protein 2 (6-76).
XX
KW Wild type; C-C chemokine; monocyte chemotactic protein 2; MCP2; HIV;
KW regulated on activation normal T-cell expressed and secreted; RANTES;
KW truncation; antagonist; medicaments; diagnosis; inflammation; infection;
KW tumour; angiogenesis; hematopoiesis; autoimmune disease; atherosclerosis;
KW pulmonary disease; skin disorder.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN EP906954-A1.
XX
PD 07-APR-1999.
XX
PF 29-SEP-1997; 97EP-0116863.
XX
PR 29-SEP-1997; 97EP-0116863.
XX
PA (ISTF) ARS APPLIED RES SYSTEMS HOLDING NV.
XX
PI Proost P, Struyf S, Van Damme J;
XX
DR WPI; 1999-207108/18.
XX
PT New amino-terminally truncated C-C chemokines have antagonistic

PT activity for treatment of immune, inflammatory and infectious
PT diseases
XX
PS Claim 4; Fig 1; 29pp; English.
XX
CC This sequence represents a truncated C-C chemokine monocyte chemotactic
CC protein 2 (MCP2) containing amino acids 6-76 of the mature protein.
CC The invention relates the generation of amino-terminal truncated C-C
CC chemokines, having chemokine antagonistic activity. The new chemokines
CC are useful as medicaments, for diagnosis and/or treatment of diseases
CC which require antagonistic activity of a chemokine e.g. inflammatory
CC diseases, HIV infection, tumours, and angiogenesis- and hematopoiesis-
CC related diseases, including auto-immune diseases, atherosclerosis,
CC pulmonary diseases and skin disorders.
XX
SQ Sequence 71 AA;

Query Match 100.0%; Score 382; DB 20; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e-38;
Matches 71; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
Db 1 sipitccfnvinrkipiqrlesytritniqcpkeavifktkrgkevcadpkerwvrdsmk 60

Qy 61 HLDQIFQNLKP 71
Db 61 hldqifqnlkp 71

RESULT 2
Y07238
ID Y07238 standard; protein; 71 AA.
XX
AC Y07238;
XX
DT 06-JUL-1999 (first entry)
XX
DE Truncated monocyte chemotactic protein 2 (6-76).
XX
KW Wild type; C-C chemokine; monocyte chemotactic protein 2; MCP2; HIV;
KW regulated on activation normal T-cell expressed and secreted; RANTES;
KW truncation; antagonist; medicaments; diagnosis; inflammation; infection;
KW tumour; angiogenesis; hematopoiesis; autoimmune disease; atherosclerosis;
KW pulmonary disease; skin disorder.
XX
OS Homo sapiens.
OS Synthetic.
XX
PN EP905241-A1.
XX
PD 31-MAR-1999.
XX
PF 10-MAR-1998; 98EP-0104216.
XX
PR 19-DEC-1997; 97EP-0122471.
PR 29-SEP-1997; 97EP-0116863.
XX
PA (ISTF) ARS APPLIED RES SYSTEMS HOLDING NV.
XX
PI Proost P, Struyf S, Van Damme J;
XX
DR WPI; 1999-206774/18.
XX
PT New amino-terminally truncated C-C chemokines have antagonistic
PT activity for treatment of immune, inflammatory and infectious
PT diseases
XX
PS Claim 4; Fig 1; 29pp; English.
XX
CC This sequence represents a truncated C-C chemokine monocyte chemotactic
CC protein 2 (MCP2) containing amino acids 6-76 of the mature protein.
CC The invention relates the generation of amino-terminal truncated C-C
CC chemokines, having chemokine antagonistic activity. The new chemokines
CC are useful as medicaments, for diagnosis and/or treatment of diseases
CC which require antagonistic activity of a chemokine e.g. inflammatory
CC diseases, HIV infection, tumours, and angiogenesis- and hematopoiesis-
CC related diseases, including auto-immune diseases, atherosclerosis,
CC pulmonary diseases and skin disorders.
XX
SQ Sequence 71 AA;

Query Match 100.0%; Score 382; DB 20; Length 71;
Best Local Similarity 100.0%; Pred. No. 1.2e-38;
Matches 71; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
Db 1 sipitccfnvinrkipiqrlesytritniqcpkeavifktkrgkevcadpkerwvrdsmk 60

Qy 61 HLDQIFQNLKP 71
Db 61 hldqifqnlkp 71

RESULT 3
Y69031
ID Y69031 standard; protein; 76 AA.
XX
AC Y69031;
XX
DT 30-MAY-2000 (first entry)
XX
DE Amino acid sequence of chemokine receptor ligand MCP-2.
XX
KW Chemokine receptor; ligand; inflammatory response; immune effector cell;
KW secondary tissue damage; central nervous system injury; MCP-2;
KW CNS inflammatory disease; neurodegenerative disorder; heart disease;
KW inflammatory eye disease; inflammatory bowel disease;
KW inflammatory joint disease; inflammatory kidney; renal disease;
KW inflammatory lung disease; inflammatory nasal disease;
KW inflammatory thyroid disease; thyroiditis; cytokine-regulated cancer.
XX
OS Homo sapiens.
XX
PN WO200004926-A2.
XX
PD 03-FEB-2000.
XX
PF 21-JUL-1999; 99WO-CA00659.
XX
PR 22-JUL-1998; 98US-0120523.
XX
PA (OSPR-) OSPREY PHARM LTD.
XX
PI McDonald JR, Coggins PJ;
XX
DR WPI; 2000-182542/16.
XX
PT A new therapeutic agent comprising a conjugate for treating secondary
PT tissue damage and other disease conditions like Alzheimer's disease,
PT stroke, Parkinson's disease and atherosclerosis -
XX
PS Disclosure; Page 60; 204pp; English.
XX
CC The present sequence represents a chemokine receptor ligand. The present
CC ligand can be incorporated into the conjugates of the invention. The
CC specification describes a conjugate, comprising a targeted agent and a
CC chemokine receptor ligand. The conjugate binds to a chemokine receptor
CC resulting in internalisation of the targeted agent in cells bearing the
CC receptor. The conjugates are used for formulating a medicament or for
CC treating disorders associated with inflammatory responses resulting from
CC activation, proliferation and migration of immune effector cells. The
CC disorders or disease states comprise secondary tissue damage such as

```
CC   central nervous system (CNS) injury, CNS inflammatory diseases,
CC   neurodegenerative disorders, heart disease, inflammatory eye diseases,
CC   inflammatory bowel diseases, inflammatory joint diseases, inflammatory
CC   kidney or renal diseases, inflammatory lung diseases, inflammatory
CC   nasal diseases, inflammatory thyroid disease such as thyroiditis, or
CC   cytokine-regulated cancers.
XX
SQ   Sequence   76 AA;


  Query Match             100.0%;  Score 382;  DB 21;  Length 76;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-38;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

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          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      6 sipitccfnvinrkipiqrlesytritniqcpkeavifktkrgkevcadpkerwvrdsmk 65

Qy     61 HLDQIFQNLKP 71
          ||||||||||||
Db     66 hldqifqnlkp 76


RESULT   4
B15786
ID   B15786 standard; Protein; 77 AA.
XX
AC   B15786;
XX
DT   17-JAN-2001  (first entry)
XX
DE   Human chemokine MCP-2 SEQ ID NO: 17.
XX
KW   Macrophage recruitment; chemokine derivative; MCP-1; osteoporosis;
KW   monocyte chemoattractant protein-1; inflammation; atherosclerosis; HIV;
KW   AIDS; stroke; psoriasis; autoimmune disease; hypertension; endotoxaemia;
KW   basophil-mediated disease; myocardial infarction; acute ischaemia;
KW   rheumatoid arthritis; contraception.
XX
OS   Homo sapiens.
XX
FH   Key             Location/Qualifiers
FT   Misc-difference 47
FT                   /note= "encoded by CAA"
XX
PN   WO200042071-A2.
XX
PD   20-JUL-2000.
XX
PF   12-JAN-2000; 2000WO-US00821.
XX
PR   12-JAN-1999;   99US-0229071.
PR   17-MAR-1999;   99US-0271192.
PR   01-DEC-1999;   99US-0452406.
XX
PA   (NEOR-) NEORX CORP.
XX
PI   Grainger DJ,  Tatalick LM;
XX
DR   WPI; 2000-499101/44.
DR   N-PSDB; A74886.
XX
PT   New peptide 3, amide and heterocyclic compounds and saccharide
PT   conjugates used for inhibiting chemokine induced activity and for
PT   treating e.g. stroke, vascular diseases, autoimmune diseases and tumour
PT   growth -
XX
PS   Example 1; Page 134; 387pp; English.
XX
CC   The present invention concerns the identification of a number of
CC   chemokines which can be used to produce derivatives, agonists and
CC   antagonists which are then useful in disease treatment. The chemokines
CC   include sequences B15785-B15794, B15803-B15813 and B15831-B15848. These
CC   chemokine derivatives can be used to treat diseases such as autoimmune
CC   diseases, atherosclerosis, osteoporosis, HIV infection and AIDS,
CC   psoriasis, inflammatory diseases, hypertension, basophil-mediated
CC   diseases, endotoxaemia, myocardial infarction, acute ischaemia and
CC   rheumatoid arthritis, and can be used to prevent strokes and as
CC   contraceptives. The coding sequences for the chemokines can be used in
CC   gene therapy for the same diseases, as well as in the production of
CC   animal models.
XX
SQ   Sequence   77 AA;


  Query Match             100.0%;  Score 382;  DB 21;  Length 77;
  Best Local Similarity   100.0%;  Pred. No. 1.3e-38;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      7 sipitccfnvinrkipiqrlesytritniqcpkeavifktkrgkevcadpkerwvrdsmk 66

Qy     61 HLDQIFQNLKP 71
          ||||||||||||
Db     67 hldqifqnlkp 77


RESULT   5
Y05300
ID   Y05300 standard; protein; 99 AA.
XX
AC   Y05300;
XX
DT   25-JUN-1999  (first entry)
XX
DE   C-C chemokine, MCP2.
XX
KW   C-C chemokine; RANTES; MCP2; chemokine antagonist; inflammatory disease;
KW   HIV infection; tumour; angiogenesis-related disease; autoimmune disease;
KW   haematopoiesis-related disease; CD26/DPP IV; immune disease; diagnosis;
KW   atherosclerosis; pulmonary disease; skin disorder; therapy.
XX
OS   Homo sapiens.
XX
PN   EP905240-A1.
XX
PD   31-MAR-1999.
XX
PF   19-DEC-1997;   97EP-0122471.
XX
PR   29-SEP-1997;   97EP-0116863.
XX
PA   (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
XX
PI   Proost P,  Struyf S,  Van Damme J;
XX
DR   WPI; 1999-216695/19.
XX
PT   New amino-terminally truncated C-C chemokines have antagonistic
PT   activity, for treatment of immune, inflammatory and infectious
PT   diseases
XX
PS   Claim 4; Fig 1; 30pp; English.
XX
CC   This sequence represents the C-C chemokine MCP2. The invention relates
CC   to amino-terminally truncated C-C chemokines, having chemokine
CC   antagonistic activity. The truncated chemokines are specifically residues
CC   26 to 91 of the RANTES sequence (see Y05299) or residues 29 to 99 of
CC   the MCP2 sequence (this sequence). The new chemokines are useful as
CC   medicaments, for diagnosis and/or treatment of diseases which require
CC   antagonistic activity of a chemokine e.g. inflammatory diseases, HIV
CC   infection, tumours, and angiogenesis- and haematopoiesis-related
CC   diseases. The invention also relates to the use of CD26/DPP IV for
CC   treatment of inflammatory, immune and infectious diseases, including
CC   autoimmune diseases, atherosclerosis, pulmonary diseases and skin
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CC   disorders.
XX
SQ   Sequence   99 AA;


  Query Match             100.0%;  Score 382;  DB 20;  Length 99;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-38;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     29 sipitccfnvinrkipiqrlesytritniqcpkeavifktkrgkevcadpkerwvrdsmk 88

Qy     61 HLDQIFQNLKP 71
          ||||||||||||
Db     89 hldqifqnlkp 99


RESULT   6
Y[redacted]3
I[redacted]Y07233 standard; protein; 99 AA.
XX
AC   Y07233;
XX
DT   06-JUL-1999  (first entry)
XX
DE   Wild type monocyte chemotactic protein 2.
XX
KW   Wild type; C-C chemokine; monocyte chemotactic protein 2; MCP2; HIV;
KW   regulated on activation normal T-cell expressed and secreted; RANTES;
KW   truncation; antagonist; medicaments; diagnosis; inflammation; infection;
KW   tumour; angiogenesis; hematopoiesis; autoimmune disease; atherosclerosis;
KW   pulmonary disease; skin disorder.
XX
OS   Homo sapiens.
XX
PN   EP906954-A1.
XX
PD   07-APR-1999.
XX
PF   29-SEP-1997;   97EP-0116863.
XX
PR   29-SEP-1997;   97EP-0116863.
XX
PA   (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
XX
PI   Proost P,  Struyf S,  Van Damme J;
XX
D[redacted]PI; 1999-207108/18.
XX
PT   New amino-terminally truncated C-C chemokines have antagonistic
PT   activity for treatment of immune, inflammatory and infectious
PT   diseases
XX
PS   Disclosure; Fig 1; 29pp; English.
XX
CC   This sequence represents the wild type C-C chemokine monocyte chemotactic
CC   protein 2 (MCP2). The invention relates the generation of amino-terminal
CC   truncated C-C chemokines, having chemokine antagonistic activity.  The
CC   new chemokines are useful as medicaments, for diagnosis and/or treatment
CC   of diseases which require antagonistic activity of a chemokine e.g.
CC   inflammatory diseases, HIV infection, tumours, and angiogenesis- and
CC   hematopoiesis-related diseases, including auto-immune diseases,
CC   atherosclerosis, pulmonary diseases and skin disorders.
XX
SQ   Sequence   99 AA;


  Query Match             100.0%;  Score 382;  DB 20;  Length 99;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-38;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     29 sipitccfnvinrkipiqrlesytritniqcpkeavifktkrgkevcadpkerwvrdsmk 88

Qy     61 HLDQIFQNLKP 71
          ||||||||||||
Db     89 hldqifqnlkp 99


RESULT   7
Y07237
ID   Y07237 standard; protein; 99 AA.
XX
AC   Y07237;
XX
DT   06-JUL-1999  (first entry)
XX
DE   Wild type monocyte chemotactic protein 2.
XX
KW   Wild type; C-C chemokine; monocyte chemotactic protein 2; MCP2; HIV;
KW   regulated on activation normal T-cell expressed and secreted; RANTES;
KW   truncation; antagonist; medicaments; diagnosis; inflammation; infection;
KW   tumour; angiogenesis; hematopoiesis; autoimmune disease; atherosclerosis;
KW   pulmonary disease; skin disorder.
XX
OS   Homo sapiens.
XX
PN   EP905241-A1.
XX
PD   31-MAR-1999.
XX
PF   10-MAR-1998;   98EP-0104216.
XX
PR   19-DEC-1997;   97EP-0122471.
PR   29-SEP-1997;   97EP-0116863.
XX
PA   (ISTF ) ARS APPLIED RES SYSTEMS HOLDING NV.
XX
PI   Proost P,  Struyf S,  Van Damme J;
XX
DR   WPI; 1999-206774/18.
XX
PT   New amino-terminally truncated C-C chemokines have antagonistic
PT   activity for treatment of immune, inflammatory and infectious
PT   diseases
XX
PS   Disclosure; Fig 1; 36pp; English.
XX
CC   This sequence represents the wild type C-C chemokine monocyte chemotactic
CC   protein 2 (MCP2). The invention relates the generation of amino-terminal
CC   truncated C-C chemokines, having chemokine antagonistic activity.  The
CC   new chemokines are useful as medicaments, for diagnosis and/or treatment
CC   of diseases which require antagonistic activity of a chemokine e.g.
CC   inflammatory diseases, HIV infection, tumours, and angiogenesis- and
CC   hematopoiesis-related diseases, including auto-immune diseases,
CC   atherosclerosis, pulmonary diseases and skin disorders.
XX
SQ   Sequence   99 AA;


  Query Match             100.0%;  Score 382;  DB 20;  Length 99;
  Best Local Similarity   100.0%;  Pred. No. 1.7e-38;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db     29 sipitccfnvinrkipiqrlesytritniqcpkeavifktkrgkevcadpkerwvrdsmk 88

Qy     61 HLDQIFQNLKP 71
          ||||||||||||
Db     89 hldqifqnlkp 99


RESULT   8
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W42072
ID W42072 standard; Protein; 109 AA.
XX
AC W42072;
XX
DT 09-JUN-1998 (first entry)
XX
DE Human MC proprotein.
XX
KW Human monocyte chemotactic proprotein; MCCP; Incyte clone; allergy;
KW macrophage; diagnostic assay; body fluid; lung; biopsy;
KW autoimmune disease; AIDS; asthma; rheumatoid arthritis; NIDDM;
KW breast cancer; bladder.
XX
OS Homo sapiens.
XX
PN WO9802459-A1.
XX
PD 22-JAN-1998.
XX
PF [redacted]15-JUL-1997; 97WO-US12349.
XX
PR 15-JUL-1996; 96US-0683655.
XX
PA (INCY-) INCYTE PHARM INC.
XX
PI Au-Young J, Coleman R, Hillman JL;
XX
DR WPI; 1998-110529/10.
DR N-PSDB; V09218.
XX
PT New human monocyte chemotactic proprotein - has homology to CC
PT chemokine(s) useful for identifying agent for treating auto-immune
PT diseases or allergic responses
XX
PS Claim 1; Pages 38-39; 53pp; English.
XX
CC The is a human monocyte chemotactic proprotein sequence. Its cDNA was
CC first identified in Incyte clone 965517 from a breast cDNA library.
CC Antisense nucleotides can be used to control human MCPP expression
CC especially where it may lead to inappropriate monocyte or macrophage
CC activity causing damage associated with allergic responses to organs
CC such as the lungs. Antisense nucleotides and MCPP cDNA may be used
CC in diagnostic assays of body fluids or biopsied tissues to detect
CC expression levels of MCPP. MCPP cDNA may also be useful for
CC treatment of disorders such as asthma, rheumatoid arthritis, NIDDM
CC or cancer of the breast or bladder. Human MCPP protein can be used to
CC identify agonists, antagonists or inhibitors to modulate the activity of
C[redacted]MCPP in allergic responses or autoimmune diseases such as AIDS.
X[redacted]
SQ Sequence 109 AA;

Query Match 100.0%; Score 382; DB 19; Length 109;
Best Local Similarity 100.0%; Pred. No. 1.9e-38;
Matches 71; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db 39 sipitccfnvinrkipiqrlesytritniqcpkeavifktkrgkevcadpkerwvrdsmk 98

Qy 61 HLDQIFQNLKP 71
|||||||||||
Db 99 hldqifqnlkp 109

RESULT 9
W26655
ID W26655 standard; Protein; 109 AA.
XX
AC W26655;
XX
DT 16-FEB-1998 (first entry)
XX
DE Human beta-chemokine H1305 (MCP-2).
XX
KW H1305; MCP-2; chemokine; human; chemoattractant; chemotaxis;
KW virus infection; HIV; therapy; wound healing; tumour; antibody.
XX
OS Homo sapiens.
XX
PN WO9725427-A1.
XX
PD 17-JUL-1997.
XX
PF 10-JAN-1997; 97WO-US00379.
XX
PR 12-JAN-1996; 96US-0586395.
XX
PA (GEMY) GENETICS INST INC.
XX
PI Lavallie ER, McCoy JM, Racie LA;
XX
DR WPI; 1997-372866/34.
DR N-PSDB; T91023.
XX
PT New human beta-chemokine, H1305 and corresponding DNA - used in the
PT treatment of viral infection, e.g. HIV, and in wound healing
XX
PS Claim 1; Page 12-13; 21pp; English.
XX
CC This protein comprises human beta-chemokine H1305, also known as
CC MCP-2. Its sequence was deduced from a claimed cDNA clone (see
CC T91023) isolated from a human peripheral blood mononuclear cell
CC cDNA library. Also claimed are: (1) a host cell, preferably
CC mammalian, transformed with a H1306 polynucleotide operably linked
CC to an expression control sequence; (2) a recombinantly produced
CC H1305 protein; and (3) a composition comprising an antibody which
CC specifically reacts with the H1305 protein. The H1305 protein
CC may be used in a composition for the treatment of a mammalian
CC subject (claimed). It is thought to have chemokine activities and
CC may therefore have an effect on chemotaxis or migration of blood
CC cells. It may be useful for inhibiting viral replication,
CC including replication of HIV, and may also be used for treatment of
CC wounds and to raise monoclonal and polyclonal antibodies which
CC specifically react with H1305. Such antibodies may be used for
CC therapy of certain tumours as they are capable of blocking the
CC ligand binding of the H1305 protein or may promote clearance of
CC the protein from the patient.
XX
SQ Sequence 109 AA;

Query Match 99.0%; Score 378; DB 18; Length 109;
Best Local Similarity 98.6%; Pred. No. 5.8e-38;
Matches 70; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
||||||||||||||||||||||||||||||||||||||||||:|||||||||||||||||||
Db 39 sipitccfnvinrkipiqrlesytritniqcpkeavifktqrgkevcadpkerwvrdsmk 98

Qy 61 HLDQIFQNLKP 71
|||||||||||
Db 99 hldqifqnlkp 109

RESULT 10
Y14223
ID Y14223 standard; peptide; 77 AA.
XX
AC Y14223;
XX
DT 29-JUL-1999 (first entry)
XX
DE Chemokine hMCP2.
XX

KW Chemokine; immune response; monocyte chemoattractant protein-1; MCP-1;
KW chemokine-induced activity; inflammatory response; vascular indication;
KW haematopoietic cell-associated activity; tumour; coronary artery disease;
KW myocardial infarction; unstable angina pectoris; atherosclerosis; asthma;
KW vasculitis; lentiviral infection; low bone mineral density; suppressor;
KW parasitic infection; autoimmune disease; psoriasis; wound healing;
KW organ transplant rejection; rheumatoid arthritis; allergy; therapy;
KW arachidonic acid pathway.
XX
OS Homo sapiens.
XX
PN WO9912968-A2.
XX
PD 18-MAR-1999.
XX
PF 11-SEP-1998; 98WO-US19052.
XX
PR 11-SEP-1997; 97US-0927939.
XX
PA (NEOR-) NEORX CORP.
XX
PI Grainger DJ, Kanaly ST, Tatalick LM;
XX
DR WPI; 1999-347124/29.
XX
PT New chemokine peptides and mimetics
XX
PS Example 1; Page 128; 208pp; English.
XX
CC This sequence represents the chemokine hMCP-2.
CC The invention relates to chemokine peptides and mimetics, particularly
CC derived from monocyte chemoattractant protein-1 (MCP-1). The chemokine
CC peptides and variants and derivatives can inhibit or reduce or increase,
CC or enhance chemokine-induced activity. They can be used for increasing or
CC enhancing an inflammatory response, an immune response or haematopoietic
CC cell-associated activity at a tumour site. They can also be used for
CC preventing or inhibiting an indication associated with haematopoietic
CC cell recruitment or histamine release from basophils or mast cells. They
CC can also be used to modulate the chemokine-induced activity of
CC haematopoietic cells at a preselected physiological site, to treat a
CC vascular indication, e.g. coronary artery disease, myocardial infarction,
CC unstable angina pectoris, atherosclerosis, or vasculitis, lentiviral
CC infection or replication (e.g. HIV), low bone mineral density, a
CC parasitic infection in a vertebrate animal (e.g. malaria), an autoimmune
CC disease, to suppress tumour growth in a vertebrate animal, to prevent or
CC treat psoriasis in a mammal, to enhance wound healing, to prevent or
CC treat asthma, organ transplant rejection, rheumatoid arthritis or
CC allergy. They can also be used to inhibit a product or intermediate in
CC the arachidonic acid pathway and where leukotriene, thromboxane and/or
CC prostaglandin are inhibited and to prevent or inhibit an indication
CC associated with elevated TNF-alpha.
XX
SQ Sequence 77 AA;

Query Match 94.0%; Score 359; DB 20; Length 77;
Best Local Similarity 95.8%; Pred. No. 7.4e-36;
Matches 68; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

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Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          ||||||| ||||||||||||||| |||||||||||||||||||||||||||||||||| |
Db       7 sipitccpnvinrkipiqrlesyrritniqcpkeavifktkrgkevcadpkerwvrdsnk 66

Qy      61 HLDQIFQNLKP 71
           ||||||||||| 
Db      67 hldqifqnlkp 77
```

RESULT 11
R70804
ID R70804 standard; Protein; 72 AA.
XX
AC R70804;
XX
DT 29-AUG-1995 (first entry)
XX
DE Chemoattractant MCP-2.
XX
KW Chemoattractant; MCP-2; heparanase; heparin; heparan sulfate;
KW arthritis; restenosis; cancer; wound healing.
XX
OS Homo sapiens.
XX
PN WO9504158-A.
XX
PD 09-FEB-1995.
XX
PF 26-JUL-1994; 94WO-US08207.
XX
PR 29-JUL-1993; 93US-0099866.
PR 13-OCT-1993; 93US-0136117.
XX
PA (UPJO) UPJOHN CO.
XX
PI Hoogwerf AJ, Ledbetter SR;
XX
DR WPI; 1995-082239/11.
XX
PT Screening for cpds. with anti-heparanase activity - by detecting
PT inhibition of heparin or heparan sulphate degradation,
PT potentially useful for treating arthritis, restenosis, cancer.
XX
PS Claim 13; Page 53; 60pp; English.
XX
CC Purified heparanases, prepared under reducing conditions and
CC activated with transglutaminase, are given in R70786-804. Most
CC are prepared by reverse transcription of mRNA from activated human
CC leukocytes, then cloning of the cDNA into pVL1392 baculovirus
CC vector, and expression in Sf9 cells in the presence of reduced
CC glutathione and dithiothreitol.
XX
SQ Sequence 72 AA;

Query Match 90.1%; Score 344; DB 16; Length 72;
Best Local Similarity 94.4%; Pred. No. 4.3e-34;
Matches 67; Conservative 0; Mismatches 2; Indels 2; Gaps 1;

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Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           || |||||||||||||||||||||||||||||||||  ||||||||||||||||||
Db       4 sifitccfnvinrkipiqrlesytritniqcpkeavifkt--gkevcadpkerwvrdsmk 61

Qy      61 HLDQIFQNLKP 71
           | ||||||||| 
Db      62 hkdqifqnlkp 72
```

RESULT 12
Y69023
ID Y69023 standard; protein; 74 AA.
XX
AC Y69023;
XX
DT 30-MAY-2000 (first entry)
XX
DE Amino acid sequence of chemokine receptor ligand eotaxin.
XX
KW Chemokine receptor; ligand; inflammatory response; immune effector cell;
KW secondary tissue damage; central nervous system injury; eotaxin;
KW CNS inflammatory disease; neurodegenerative disorder; heart disease;
KW inflammatory eye disease; inflammatory bowel disease;
KW inflammatory joint disease; inflammatory kidney; renal disease;
KW inflammatory lung disease; inflammatory nasal disease;
KW inflammatory thyroid disease; thyroiditis; cytokine-regulated cancer.
XX
OS Homo sapiens.

XX
PN WO200004926-A2.
XX
PD 03-FEB-2000.
XX
PF 21-JUL-1999; 99WO-CA00659.
XX
PR 22-JUL-1998; 98US-0120523.
XX
PA (OSPR-) OSPREY PHARM LTD.
XX
PI McDonald JR, Coggins PJ;
XX
DR WPI; 2000-182542/16.
XX
PT A new therapeutic agent comprising a conjugate for treating secondary
PT tissue damage and other disease conditions like Alzheimer's disease,
PT stroke, Parkinson's disease and atherosclerosis -
XX
PS Disclosure; Page 59; 204pp; English.
XX
CC The present sequence represents a chemokine receptor ligand. The present
CC ligand can be incorporated into the conjugates of the invention. The
CC specification describes a conjugate, comprising a targeted agent and a
CC chemokine receptor ligand. The conjugate binds to a chemokine receptor
CC resulting in internalisation of the targeted agent in cells bearing the
CC receptor. The conjugates are used for formulating a medicament or for
CC treating disorders associated with inflammatory responses resulting from
CC activation, proliferation and migration of immune effector cells. The
CC disorders or disease states comprise secondary tissue damage such as
CC central nervous system (CNS) injury, CNS inflammatory diseases,
CC neurodegenerative disorders, heart disease, inflammatory eye diseases,
CC inflammatory bowel diseases, inflammatory joint diseases, inflammatory
CC kidney or renal diseases, inflammatory lung diseases, inflammatory
CC nasal diseases, inflammatory thyroid disease such as thyroiditis, or
CC cytokine-regulated cancers.
XX
SQ Sequence 74 AA;

Query Match 69.9%; Score 267; DB 21; Length 74;
Best Local Similarity 66.2%; Pred. No. 7.5e-25;
Matches 47; Conservative 13; Mismatches 11; Indels 0; Gaps 0;

```
Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          |:| ||||||: ||||||:|||||| ||||: :|||::|||||||  |::||||||::|||:||||
Db      4 svpttccfnlanrkiplqrlesyrritsgkcpqkavifktklakdicadpkkkwvqdsmk 63

Qy     61 HLDQIFQNLKP 71
          :|||     ||
Db     64 yldqksptpkp 74
```

RESULT 13
W00667
ID W00667 standard; Protein; 97 AA.
XX
AC W00667;
XX
DT 02-MAY-1997 (first entry)
XX
DE Pancreas expressed chemokine-1.
XX
KW Pancreas-derived chemokine; PANEC-1; PANEC-2; diagnosis;
KW inflammation; disease; cancer.
XX
OS Homo sapiens.
XX
PN WO9625497-A1.
XX
PD 22-AUG-1996.
XX
PF 16-FEB-1996; 96WO-US02225.
XX
PR 17-FEB-1995; 95US-0390740.
XX
PA (INCY-) INCYTE PHARM INC.
XX
PI Bandman O, Coleman R, Wilde CG;
XX
DR WPI; 1996-393398/39.
DR N-PSDB; T33527.
XX
PT Nucleotide and protein sequences for human PANEC-1 and PANEC-2 -
PT useful in diagnosis and therapy of pancreatic diseases
XX
PS Claim 8; Page 28-29; 43pp; English.
XX
CC The sequences given in W00667-68 represent pancreas-derived chemokines,
CC PANEC-1 and PANEC-2. These chemokines are highly expressed and
CC specifically expressed in the pancreas and may therefore be used in
CC diagnostic assays based on chemokine production in cases of
CC inflammation or disease affecting the pancreas. These assays allow
CC the early and accurate diagnosis of pancreatic disorders, and can
CC differentiate between invasive diseases and genetic syndromes.
XX
SQ Sequence 97 AA;

Query Match 69.9%; Score 267; DB 17; Length 97;
Best Local Similarity 66.2%; Pred. No. 1e-24;
Matches 47; Conservative 13; Mismatches 11; Indels 0; Gaps 0;

```
Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          |:| ||||||: ||||||:|||||| ||||: :|||::|||||||  |::||||||::|||:||||
Db     27 svpttccfnlanrkiplqrlesyrritsgkcpqkavifktklakdicadpkkkwvqdsmk 86

Qy     61 HLDQIFQNLKP 71
          :|||     ||
Db     87 yldqksptpkp 97
```

RESULT 14
W14990
ID W14990 standard; Protein; 97 AA.
XX
AC W14990;
XX
DT 01-DEC-1997 (first entry)
XX
DE Human eosinocyte CC type chemokine eotaxin.
XX
KW Human; eosinocyte; CC type; chemokine; eotaxin; calcium; skin;
KW small intestine; agonist; screening; antagonist; inflammation;
KW antibody; diagnosis; assay; disorder; asthma; allergy; atopic.
XX
OS Homo sapiens.
XX
PN WO9712914-A1.
XX
PD 10-APR-1997.
XX
PF 01-OCT-1996; 96WO-JP02851.
XX
PR 28-FEB-1996; 96JP-0041965.
PR 05-OCT-1995; 95JP-0259067.
XX
PA (SHIO) SHIONOGI & CO LTD.
XX
PI Harada S, Kitaura M, Nakajima T;
XX
DR WPI; 1997-226168/20.
DR N-PSDB; T62944.
XX
PT Human CC chemokine (eotaxin) active on eosinocytes - useful for
PT screening for eotaxin (ant)agonist(s), e.g. for treating

PT inflammation
XX
PS Claim 2; Pages 27-28; 45pp; Japanese.
XX
CC The present sequence is the human eosinocyte, CC type
CC chemokine, eotaxin, which increases calcium flux in human
CC eosinocytes and is a human analogue of guinea pig eotaxin. The
CC eotaxin was derived from human small intestine, and is a specific
CC agonist for human CC type chemokine receptor 3. It may be used to
CC screen potential agonists and antagonists, which may be useful as
CC anti-inflammatories. An anti-eotaxin antibody may be used in
CC diagnostic assays for eotaxin, which is implicated in inflammatory
CC disorders, e.g. asthma, other allergies and atopic skin
CC inflammation.
XX
SQ Sequence 97 AA;

Query Match 69.9%; Score 267; DB 18; Length 97;
Best Local Similarity 66.2%; Pred. No. 1e-24;
Matches 47; Conservative 13; Mismatches 11; Indels 0; Gaps 0;

Qy 1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
:| ||||| |||||:|||||| ||| :||::|||||| |::|||||::||:||||
Db 27 svpttccfnlanrkiplqrlesyrritsgkcpqkavifktklakdicadpkkkwvqdsmk 86

Qy 61 HLDQIFQNLKP 71
:||| ||
Db 87 yldqksptpkp 97

RESULT 15
W10099
ID W10099 standard; Protein; 97 AA.
XX
AC W10099;
XX
DT 30-SEP-1997 (first entry)
XX
DE Human eotaxin.
XX
KW Human; eotaxin; eosinophil; chemoattractant; stimulation;
KW accumulation; attraction; chemotaxis; diagnosis; prevention;
KW treatment; disease; inflammation; allergy; asthma; rhinitis;
KW hypersensitivity; lung; pneumonia; Loeffler's; syndrome;
KW interstitial; ILD; idiopathic pulmonary fibrosis;
KW rheumatoid arthritis; systemic; lupus erythematosus; SLE;
KW ankylosing spondylitis; sclerosis; Sjorgen's; polymyositis;
KW dermatomyositis; bowel; anaphylaxis; drug; penicillin;
KW cephalosporin; insect sting; Crohn's; ulcerative colitis;
KW spondyloarthropathy; scleroderma; psoriasis; dermatosis;
KW dermatitis; eczema; atopic; urticaria; necrotising; cutaneous;
KW vasculitis; myositis; fascitis; multiple sclerosis;
KW myasthenia gravis; juvenile onset diabetes; glomerulonephritis;
KW autoimmune; thyroiditis; Bechet's; graft; rejection;
KW transplantation; allograft; graft versus host; cancer;
KW leukocyte infiltration; reperfusion injury; atherosclerosis;
KW haematologic malignancy; septic; endotoxic; shock;
KW polymyositis; dermatomyositis; immunosuppression; immunodeficiency;
KW AIDS; radiation therapy; chemotherapy; autoimmune; corticosteroid;
KW infection.
XX
OS Homo sapiens.
XX
PN WO9700960-A1.
XX
PD 09-JAN-1997.
XX
PF 21-JUN-1996; 96WO-US10723.
XX
PR 23-JUN-1995; 95US-0494093.
XX
PA (LEUK-) LEUKOSITE INC.
XX
PI MacKay C, Newman W, Ponath PD, Qin S, Ringler DJ;
XX
DR WPI; 1997-087387/08.
DR N-PSDB; T58777.
XX
PT New isolated human eotaxin gene - used to develop prods. for the
PT diagnosis and treatment of e.g. inflammation, allergies, auto-immune
PT disease, infections and tumours
XX
PS Claim 3; Pages 95-96; 130pp; English.
XX
CC The present sequence is human eotaxin (hE), an eosinophil
CC specific chemoattractant capable of stimulating eosinophil
CC accumulation and/or attracting eosinophils (including chemotaxis).
CC It can be used to develop products for the diagnosis, prevention or
CC treatment of hE associated diseases or conditions. The products can
CC be used to treat inflammatory or allergic diseases and conditions,
CC including respiratory allergic diseases (e.g. asthma, allergic
CC rhinitis, hypersensitivity lung diseases or pneumonitis,
CC eosinophilic pneumonias such as Loeffler's syndrome and chronic
CC eosinophilic pneumonia, interstitial lung diseases (ILD) such as
CC idiopathic pulmonary fibrosis or ILD associated with rheumatoid
CC arthritis, systemic lupus erythematosus (SLE), ankylosing
CC spondylitis, systemic sclerosis, Sjorgen's syndrome, polymyositis
CC or dermatomyositis), systemic anaphylaxis or hypersensitivity
CC responses, drug allergies (e.g. to penicillin and cephalosporins),
CC insect sting allergies, inflammatory bowel diseases (e.g. Crohn's
CC disease and ulcerative colitis), spondyloarthropathies,
CC scleroderma, psoriasis and inflammatory dermatoses (e.g.
CC dermatitis, eczema, atopic dermatitis, allergic contact dermatitis,
CC urticaria and necrotising, cutaneous and hypersensitivity
CC vasculitis), eosinophilic myositis and fascitis, multiple
CC sclerosis, SLE, myasthenia gravis, juvenile onset diabetes,
CC glomerulonephritis, autoimmune thyroiditis, Bechet's disease, graft
CC rejection (e.g in transplantation) including allograft rejection or
CC graft versus host disease and cancers with leukocyte infiltration
CC of the skin or organs. The products can also be used to treat other
CC diseases or conditions requiring the inhibition of undesirable
CC inflammatory responses, including reperfusion injury,
CC atherosclerosis, certain haematologic malignancies, cytokine
CC induced toxicity (e.g. septic or endotoxic shock), polymyositis,
CC dermatomyositis, immunosuppression (e.g. in individuals with
CC immunodeficiency syndromes such as AIDS, undergoing radiation
CC therapy, chemotherapy, therapy for autoimmune disease or other drug
CC therapy, such as corticosteroid therapy, which causes
CC immunosuppression), immunosuppression due to (e.g. congenital)
CC deficiency (e.g in eotaxin) or infectious diseases such as parasitic
CC diseases.
CC Degenerate primers based on the guinea pig eotaxin amino acid
CC sequence were used for the reverse transcriptase polymerase chain
CC reaction (RT-PCR) amplification of RNA isolated from inflamed,
CC eosinophilic lung tissue obtained from Balb/c mice sensitised to
CC ovalbumin. The amplification product was used as a probe to screen
CC a human genomic library in vector EMBL3 SP6/T7 to obtain the hE
CC gene.
XX
SQ Sequence 97 AA;

Query Match 69.9%; Score 267; DB 18; Length 97;
Best Local Similarity 66.2%; Pred. No. 1e-24;
Matches 47; Conservative 13; Mismatches 11; Indels 0; Gaps 0;

Qy 1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
:| ||||| |||||:|||||| ||| :||::|||||| |::|||||::||:||||
Db 27 svpttccfnlanrkiplqrlesyrritsgkcpqkavifktklakdicadpkkkwvqdsmk 86

Qy 61 HLDQIFQNLKP 71
:||| ||
Db 87 yldqksptpkp 97

Search completed: May 29, 2001, 13:55:12
Job time: 128 sec

GenCore version 4.5

OM protein - protein search, using sw model

Run on: May 29, 2001, 13:53:44 ; Search time 18.54 Seconds
(without alignments)
73.569 Million cell updates/sec

Title: US-09-537-859-3
Perfect score: 382
Sequence: 1 SIPITCCFNVINRKIPIQRL.....ERWVRDSMKHLDQIFQNLKP 71

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 185757 seqs, 19210857 residues

[redacted] number of hits satisfying chosen parameters: 185757

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued_Patents_AA:*
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2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
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5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
6: /cgn2_6/ptodata/2/iaa/backfiles1.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	382	100.0	74	2	US-08-615-232A-6	Sequence 6, Appli
2	382	100.0	74	3	US-08-470-323-6	Sequence 6, Appli
3	382	100.0	76	1	US-08-480-449-20	Sequence 20, Appl
4	382	100.0	76	2	US-08-716-188-3	Sequence 3, Appli
5	382	100.0	76	2	US-08-660-542-20	Sequence 20, Appl
6	382	100.0	77	1	US-08-347-492B-9	Sequence 9, Appli
7	382	100.0	77	2	US-08-421-144A-6	Sequence 6, Appli
8	382	100.0	77	2	US-08-798-143-9	Sequence 9, Appli
9	267	69.9	74	4	US-08-613-822-20	Sequence 20, Appl
10	246	64.4	76	1	US-07-956-862A-1	Sequence 1, Appli
11	246	64.4	76	1	US-08-250-958-1	Sequence 1, Appli
12	246	64.4	76	1	US-08-235-659-1	Sequence 1, Appli
13	246	64.4	76	2	US-08-716-188-2	Sequence 2, Appli
14	246	64.4	76	2	US-08-615-232A-5	Sequence 5, Appli
15	246	64.4	76	3	US-08-470-323-5	Sequence 5, Appli
16	246	64.4	78	1	US-08-330-163-12	Sequence 12, Appl
17	246	64.4	78	1	US-08-482-111-12	Sequence 12, Appl
18	246	64.4	78	5	PCT-US95-00605-1	Sequence 1, Appli
19	246	64.4	99	1	US-08-127-499A-35	Sequence 35, Appl
20	246	64.4	99	1	US-08-482-847-35	Sequence 35, Appl
21	246	64.4	99	1	US-08-347-492B-8	Sequence 8, Appli
22	246	64.4	99	1	US-08-480-449-19	Sequence 19, Appl
23	246	64.4	99	2	US-08-479-126B-5	Sequence 5, Appli
24	246	64.4	99	2	US-08-421-144A-5	Sequence 5, Appli
25	246	64.4	99	2	US-08-726-830A-5	Sequence 5, Appli
26	246	64.4	99	2	US-08-660-542-19	Sequence 19, Appl
27	246	64.4	99	2	US-08-798-143-8	Sequence 8, Appli
28	246	64.4	99	3	US-07-927-391-24	Sequence 24, Appl
29	246	64.4	99	3	US-08-995-156A-5	Sequence 5, Appli
30	246	64.4	99	3	US-09-044-856A-5	Sequence 5, Appli
31	246	64.4	99	3	US-09-044-855A-5	Sequence 5, Appli
32	246	64.4	99	5	PCT-US96-10087-5	Sequence 5, Appli
33	246	64.4	99	6	5212073-2	Patent No. 5212073
34	233	61.0	76	4	US-08-613-822-19	Sequence 19, Appl
35	233	61.0	99	1	US-08-480-449-18	Sequence 18, Appl
36	233	61.0	99	2	US-08-660-542-18	Sequence 18, Appl
37	233	61.0	99	4	US-08-613-822-18	Sequence 18, Appl
38	233	61.0	109	2	US-08-421-144A-7	Sequence 7, Appli
39	233	61.0	109	3	US-07-927-391-16	Sequence 16, Appl
40	232	60.7	76	2	US-08-716-188-4	Sequence 4, Appli
41	227	59.4	70	2	US-08-615-232A-7	Sequence 7, Appli
42	219	57.3	73	2	US-08-615-232A-2	Sequence 2, Appli
43	219	57.3	73	3	US-08-470-323-2	Sequence 2, Appli
44	218	57.1	86	2	US-08-421-144A-9	Sequence 9, Appli
45	215.5	56.4	98	4	US-08-613-822-4	Sequence 4, Appli

ALIGNMENTS

```
RESULT   1
US-08-615-232A-6
; Sequence 6, Application US/08615232A
; Patent No. 5993814
;  GENERAL INFORMATION:
;    APPLICANT:  WILLIAMS, TIMOTHY J.
;    APPLICANT:  JOSE, PETER J.
;    APPLICANT:  GRIFFITHS-JOHNSON, DAVID A.
;    APPLICANT:  HSUAN, JOHN J.
;    TITLE OF INVENTION:  CHEMOTACTIC CYTOKINE
;    NUMBER OF SEQUENCES:  11
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NIXON & VANDERHYE P.C.
;      STREET:  1100 NORTH GLEBE ROAD, 8TH FLOOR
;      CITY:  ARLINGTON
;      STATE:  VIRGINIA
;      COUNTRY:  U.S.A.
;      ZIP:  22201-4714
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/615,232A
;      FILING DATE:  13-AUG-1996
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB 9318984
;      FILING DATE:  14-SEP-1993
;      APPLICATION NUMBER:  GB 9408602
;      FILING DATE:  29-APR-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WILSON, MARY J.
;      REGISTRATION NUMBER:  32,955
;      REFERENCE/DOCKET NUMBER:  550-32
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 816-4000
;      TELEFAX:  (703) 816-4100
;  INFORMATION FOR SEQ ID NO:  6:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  74 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-615-232A-6

  Query Match                 100.0%;  Score 382;  DB 2;  Length 74;
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  Best Local Similarity   100.0%;  Pred. No. 2.3e-43;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 63

Qy      61 HLDQIFQNLKP 71
           ||||||||||||
Db      64 HLDQIFQNLKP 74


RESULT   2
US-08-470-323-6
; Sequence 6, Application US/08470323A
; Patent No. 6031080
; GENERAL INFORMATION:
;  APPLICANT: WILLIAMS, TIMOTHY J.
;  APPLICANT: JOSE, PETER J.
;  APPLICANT: GRIFFITHS-JOHNSON, DAVID A.
;  APPLICANT: HSUAN, JOHN J.
;  TITLE OF INVENTION: CHEMOTACTIC CYTOKINE
;  FILE REFERENCE: 550-33
;  CURRENT APPLICATION NUMBER: US/08/470,323A
;  CURRENT FILING DATE: 1995-06-06
;  EARLIER APPLICATION NUMBER: PCT/GB94/02006
;  EARLIER FILING DATE: 1994-09-14
;  EARLIER APPLICATION NUMBER: GB 9318984.3
;  EARLIER FILING DATE: 1993-09-14
;  EARLIER APPLICATION NUMBER: GB 94086902.2
;  EARLIER FILING DATE: 1994-04-29
;  NUMBER OF SEQ ID NOS: 11
; SEQ ID NO 6
;   LENGTH: 74
;   TYPE: PRT
;   ORGANISM: human
US-08-470-323-6


  Query Match             100.0%;  Score 382;  DB 3;  Length 74;
  Best Local Similarity   100.0%;  Pred. No. 2.3e-43;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       4 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 63

Qy      61 HLDQIFQNLKP 71
           ||||||||||||
Db      64 HLDQIFQNLKP 74


RESULT   3
US-08-480-449-20
; Sequence 20, Application US/08480449
; Patent No. 5688927
;  GENERAL INFORMATION:
;    APPLICANT:  Godiska, Ronald
;    APPLICANT:  Gray, Patrick W.
;    TITLE OF INVENTION:  MACROPHAGE DERIVED CHEMOKINE
;    NUMBER OF SEQUENCES:  24
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/480,449
;      FILING DATE:
;      CLASSIFICATION:  530
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Gass, David A.
;      REGISTRATION NUMBER:  38,153
;      REFERENCE/DOCKET NUMBER:  27866/32779
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  20:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  76 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "Hu MCP-2"
US-08-480-449-20


  Query Match             100.0%;  Score 382;  DB 1;  Length 76;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-43;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 65

Qy      61 HLDQIFQNLKP 71
           ||||||||||||
Db      66 HLDQIFQNLKP 76


RESULT   4
US-08-716-188-3
; Sequence 3, Application US/08716188
; Patent No. 5908829
;  GENERAL INFORMATION:
;    APPLICANT:  KELLY, RODNEY W
;    TITLE OF INVENTION:  USE OF MCP-1 FOR INDUCING RIPENING OF
;    TITLE OF INVENTION:  THE CERVIX
;    NUMBER OF SEQUENCES:  7
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NIXON & VANDERHYE P.C.
;      STREET:  1100 NORTH GLEBE ROAD
;      CITY:  ARLINGTON
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22201
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/716,188
;      FILING DATE:  30-SEP-1996
;      CLASSIFICATION:  530
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB95/00733
;      FILING DATE:  31-MAR-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB 9406463.1
;      FILING DATE:  31-MAR-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  SADOFF, B.J.
;      REGISTRATION NUMBER:  36,663
;      REFERENCE/DOCKET NUMBER:  117-219
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;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-816-4091
;      TELEFAX:  703-816-4100
;  INFORMATION FOR SEQ ID NO:  3:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  76 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-716-188-3


  Query Match             100.0%;  Score 382;  DB 2;  Length 76;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-43;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db       6 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 65

Qy      61 HLDQIFQNLKP 71
           ||||||||||||
Db      66 HLDQIFQNLKP 76


RESULT   5
US-08-660-542-20
; Sequence 20, Application US/08660542
; Patent No. 5932703
;  GENERAL INFORMATION:
;    APPLICANT:  Godiska, Ronald
;    APPLICANT:  Gray, Patrick W.
;    TITLE OF INVENTION:  MACROPHAGE DERIVED CHEMOKINE AND CHEMOKINE
;    TITLE OF INVENTION:  ANALOGS
;    NUMBER OF SEQUENCES:  32
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Marshall, O'Toole, Gerstein, Murray & Borun
;      STREET:  6300 Sears Tower, 233 South Wacker Drive
;      CITY:  Chicago
;      STATE:  Illinois
;      COUNTRY:  United States of America
;      ZIP:  60606-6402
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/660,542
;      FILING DATE:
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/558,658
;      FILING DATE:  16-NOV-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/479,620
;      FILING DATE:  07-JUN-1995
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Gass, David A.
;      REGISTRATION NUMBER:  38,153
;      REFERENCE/DOCKET NUMBER:  27866/33318
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  312/474-6300
;      TELEFAX:  312/474-0448
;      TELEX:  25-3856
;  INFORMATION FOR SEQ ID NO:  20:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  76 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FEATURE:
;      NAME/KEY:  misc_feature
;      OTHER INFORMATION:  "Hu MCP-2"
US-08-660-542-20


  Query Match             100.0%;  Score 382;  DB 2;  Length 76;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-43;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
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Db       6 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 65

Qy      61 HLDQIFQNLKP 71
           ||||||||||||
Db      66 HLDQIFQNLKP 76


RESULT   6
US-08-347-492B-9
; Sequence 9, Application US/08347492B
; Patent No. 5602008
;  GENERAL INFORMATION:
;    APPLICANT:  Wilde, Craig G.
;    APPLICANT:  Hawkins, Phillip R.
;    APPLICANT:  Bandman, Olga
;    APPLICANT:  Seilhamer, Jeffrey J.
;    TITLE OF INVENTION:  EXPRESSED CHEMOKINES, THEIR
;    TITLE OF INVENTION:  PRODUCTION AND USES
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Incyte Pharmaceuticals, Inc.
;      STREET:  3174 Porter Drive
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  U.S.
;      ZIP:  94304
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/347,492B
;      FILING DATE:  29-NOV-1994
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/303,241
;      FILING DATE:  07-SEP-1994
;      APPLICATION NUMBER:  08/320,011
;      FILING DATE:  05-OCT-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Luther, Barbara J
;      REGISTRATION NUMBER:  33,954
;      REFERENCE/DOCKET NUMBER:  PF-0024
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-855-0555
;      TELEFAX:  415-852-0195
;  INFORMATION FOR SEQ ID NO:  9:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  77 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    IMMEDIATE SOURCE:
;      LIBRARY:  GENBANK
;      CLONE:  GI 126829
US-08-347-492B-9


  Query Match             100.0%;  Score 382;  DB 1;  Length 77;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-43;
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  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      7 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 66

Qy     61 HLDQIFQNLKP 71
          ||||||||||||
Db     67 HLDQIFQNLKP 77


RESULT   7
US-08-421-144A-6
; Sequence 6, Application US/08421144A
; Patent No. 5874211
;  GENERAL INFORMATION:
;    APPLICANT:  BANDMAN, OLGA
;    APPLICANT:  COLEMAN, ROGER
;    APPLICANT:  STUART, SUSAN G.
;    TITLE OF INVENTION:  NEW CHEMOKINE EXPRESSED IN EOSINOPHILS
;    NUMBER OF SEQUENCES:  9
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  INCYTE PHARMACEUTICALS, INC.
;      STREET:  3174 Porter Drive
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  USA
;      ZIP:  94304
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/421,144A
;      FILING DATE:  13-APR-1995
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Luther, Barbara J.
;      REGISTRATION NUMBER:  33954
;      REFERENCE/DOCKET NUMBER:  PF-0031 US
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-855-0555
;      TELEFAX:  415-852-0195
;  INFORMATION FOR SEQ ID NO:  6:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  77 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-421-144A-6


  Query Match             100.0%;  Score 382;  DB 2;  Length 77;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-43;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      7 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 66

Qy     61 HLDQIFQNLKP 71
          ||||||||||||
Db     67 HLDQIFQNLKP 77


RESULT   8
US-08-798-143-9
; Sequence 9, Application US/08798143
; Patent No. 5936068
;  GENERAL INFORMATION:
;    APPLICANT:  Wilde, Craig G.
;    APPLICANT:  Hawkins, Phillip R.
;    APPLICANT:  Bandman, Olga
;    APPLICANT:  Seilhamer, Jeffrey J.
;    TITLE OF INVENTION:  EXPRESSED CHEMOKINES, THEIR
;    TITLE OF INVENTION:  PRODUCTION AND USES
;    NUMBER OF SEQUENCES:  12
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Incyte Pharmaceuticals, Inc.
;      STREET:  3174 Porter Drive
;      CITY:  Palo Alto
;      STATE:  CA
;      COUNTRY:  U.S.
;      ZIP:  94304
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Diskette
;      COMPUTER:  IBM Compatible
;      OPERATING SYSTEM:  DOS
;      SOFTWARE:  FastSEQ Version 1.5
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/798,143
;      FILING DATE:  10-FEB-1997
;      CLASSIFICATION:  536
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  08/347,492
;      FILING DATE:  29-NOV-1994
;      APPLICATION NUMBER:  08/303,241
;      FILING DATE:  07-SEP-1994
;      APPLICATION NUMBER:  08/320,011
;      FILING DATE:  05-OCT-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Luther, Barbara J
;      REGISTRATION NUMBER:  33,954
;      REFERENCE/DOCKET NUMBER:  PF-0024
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  415-855-0555
;      TELEFAX:  415-852-0195
;  INFORMATION FOR SEQ ID NO:  9:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  77 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    IMMEDIATE SOURCE:
;      LIBRARY:  GENBANK
;      CLONE:  GI 126829
US-08-798-143-9


  Query Match             100.0%;  Score 382;  DB 2;  Length 77;
  Best Local Similarity   100.0%;  Pred. No. 2.4e-43;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy      1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
          ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db      7 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 66

Qy     61 HLDQIFQNLKP 71
          ||||||||||||
Db     67 HLDQIFQNLKP 77


RESULT   9
US-08-613-822-20
; Sequence 20, Application US/08613822
; Patent No. 6174995
;  GENERAL INFORMATION:
;    APPLICANT:  Li, Haodong
;    TITLE OF INVENTION:  Human Chemokine Polypeptides
;    NUMBER OF SEQUENCES:  20
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Human Genome Sciences,Inc.
;      STREET:  9410 Key West Avenue
```

```
;      CITY:  Rockville
;      STATE:  MD
;      COUNTRY:  USA
;      ZIP:  20850
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/613,822
;      FILING DATE:  23-FEB-1996
;      CLASSIFICATION:  435
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  Millstein, Larry S
;      REGISTRATION NUMBER:  34,679
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  301-309-8504
;      TELEFAX:  301-309-8512
;  [redacted]FORMATION FOR SEQ ID NO:  20:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  74 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  protein
US-08-613-822-20


  Query Match             69.9%;  Score 267;  DB 4;  Length 74;
  Best Local Similarity   66.2%;  Pred. No. 3.3e-28;
  Matches   47;  Conservative   13;  Mismatches   11;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           |:| ||||:|||||:|||||| |||: :||::||||||  |::||||::||:||||
Db       4 SVPTTCCFNLANRKIPLQRLESYRRITSGKCPQKAVIFKTKLAKDICADPKKKWVQDSMK 63

Qy      61 HLDQIFQNLKP 71
           :|||     ||
Db      64 YLDQKSPTPKP 74


RESULT  10
US-07-956-862A-1
; Sequence 1, Application US/07956862A
; Patent No. 5413778
;  GENERAL INFORMATION:
;    APPLICANT:  KUNKEL, STEVEN L.
;  [redacted]APPLICANT:  LYLE, LEON R.
;    APPLICANT:  STRIETER, ROBERT M.
;    TITLE OF INVENTION:  LABELLED MONOCYTE CHEMOATTRACTANT
;    TITLE OF INVENTION:  PROTEIN MATERIAL AND MEDICAL USES
;    TITLE OF INVENTION:  THEREOF
;    NUMBER OF SEQUENCES:  1
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Rothwell, Figg, Ernst & Kurz
;      STREET:  Suite 701-E, 555 Thirteenth St., N.W
;      CITY:  Washington
;      STATE:  D. C.
;      COUNTRY:  U.S.A.
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/07/956,862A
;      FILING DATE:  05-OCT-1992
;      CLASSIFICATION:  424
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  REPPER, GEORGE R.
;      REGISTRATION NUMBER:  31,414
;      REFERENCE/DOCKET NUMBER:  1670-197A
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202)783-6040
;      TELEFAX:  (202)783-6031
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  76 amino acids
;      TYPE:  amino acid
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    HYPOTHETICAL:  NO
;    FRAGMENT TYPE:  N-terminal
US-07-956-862A-1


  Query Match             64.4%;  Score 246;  DB 1;  Length 76;
  Best Local Similarity   64.7%;  Pred. No. 2e-25;
  Matches   44;  Conservative   10;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       3 PITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMKHL 62
           |:|||:|  |||| :||| || |||: :||||||||||   ||:|||||::||:||| ||
Db       8 PVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADPKQKWVQDSMDHL 67

Qy      63 DQIFQNLK 70
           |:  |  |
Db      68 DKQTQTPK 75


RESULT  11
US-08-250-958-1
; Sequence 1, Application US/08250958
; Patent No. 5571713
;  GENERAL INFORMATION:
;    APPLICANT:  LYLE, LEON R.
;    APPLICANT:  KUNKEL, STEVEN L.
;    APPLICANT:  STRIETER, ROBERT M.
;    TITLE OF INVENTION:  THERAPEUTIC TREATMENT FOR INHIBITING
;    TITLE OF INVENTION:  VASCULAR RESTENOSIS
;    NUMBER OF SEQUENCES:  10
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Rothwell, Figg, Ernst & Kurz
;      STREET:  Suite 701-E, 555 Thirteenth St., N.W
;      CITY:  Washington
;      STATE:  D. C.
;      COUNTRY:  U.S.A.
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/250,958
;      FILING DATE:  27-MAY-1994
;      CLASSIFICATION:  514
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/965,678
;      FILING DATE:  22-OCT-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WALKER, Barbara W.
;      REGISTRATION NUMBER:  35,400
;      REFERENCE/DOCKET NUMBER:  2077-206A
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202)783-6040
;      TELEFAX:  (202)783-6031
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  76 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    HYPOTHETICAL:  NO
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;    FRAGMENT TYPE:  N-terminal
US-08-250-958-1


  Query Match             64.4%;  Score 246;  DB 1;  Length 76;
  Best Local Similarity   64.7%;  Pred. No. 2e-25;
  Matches   44;  Conservative   10;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       3 PITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMKHL 62
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Db       8 PVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADPKQKWVQDSMDHL 67

Qy      63 DQIFQNLK 70
           |:  |  |
Db      68 DKQTQTPK 75


RESULT  12
US-08-235-659-1
; Sequence 1, Application US/08235659
; Patent No. 5605671
; GENERAL INFORMATION:
;    APPLICANT:  Lyle, Leon R.
;    APPLICANT:  Kunkel, Steven L.
;    APPLICANT:  Strieter, Robert M.
;    TITLE OF INVENTION:  LABELLED CHEMOKINE MATERIALS AND
;    TITLE OF INVENTION:  MEDICAL USES THEREOF
;    NUMBER OF SEQUENCES:  2
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  Rothwell, Figg, Ernst & Kurz
;      STREET:  Suite 701-E, 555 Thirteenth St., N.W
;      CITY:  Washington
;      STATE:  D. C.
;      COUNTRY:  U.S.A.
;      ZIP:  20004
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/235,659
;      FILING DATE:  29-APR-1994
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/956,862
;      FILING DATE:  05-OCT-1992
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  07/956,863
;      FILING DATE:  05-OCT-1992
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WALKER, Barbara W.
;      REGISTRATION NUMBER:  35,400
;      REFERENCE/DOCKET NUMBER:  2077-205A
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (202)783-6040
;      TELEFAX:  (202)783-6031
;  INFORMATION FOR SEQ ID NO:  1:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  76 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  not relevant
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
;    FRAGMENT TYPE:  N-terminal
US-08-235-659-1


  Query Match             64.4%;  Score 246;  DB 1;  Length 76;
  Best Local Similarity   64.7%;  Pred. No. 2e-25;
  Matches   44;  Conservative   10;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       3 PITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMKHL 62
           |:|||:|  |||| :||| || |||: :|||||||||   ||:||||::||:||| ||
Db       8 PVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADPKQKWVQDSMDHL 67

Qy      63 DQIFQNLK 70
           |:  |  |
Db      68 DKQTQTPK 75


RESULT  13
US-08-716-188-2
; Sequence 2, Application US/08716188
; Patent No. 5908829
;  GENERAL INFORMATION:
;    APPLICANT:  KELLY, RODNEY W
;    TITLE OF INVENTION:  USE OF MCP-1 FOR INDUCING RIPENING OF
;    TITLE OF INVENTION:  THE CERVIX
;    NUMBER OF SEQUENCES:  7
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NIXON & VANDERHYE P.C.
;      STREET:  1100 NORTH GLEBE ROAD
;      CITY:  ARLINGTON
;      STATE:  VA
;      COUNTRY:  USA
;      ZIP:  22201
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.30
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/716,188
;      FILING DATE:  30-SEP-1996
;      CLASSIFICATION:  530
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  PCT/GB95/00733
;      FILING DATE:  31-MAR-1995
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB 9406463.1
;      FILING DATE:  31-MAR-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  SADOFF, B.J.
;      REGISTRATION NUMBER:  36,663
;      REFERENCE/DOCKET NUMBER:  117-219
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  703-816-4091
;      TELEFAX:  703-816-4100
;  INFORMATION FOR SEQ ID NO:  2:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  76 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-716-188-2


  Query Match             64.4%;  Score 246;  DB 2;  Length 76;
  Best Local Similarity   64.7%;  Pred. No. 2e-25;
  Matches   44;  Conservative   10;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       3 PITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMKHL 62
           |:|||:|  |||| :||| || |||: :|||||||||   ||:||||::||:||| ||
Db       8 PVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADPKQKWVQDSMDHL 67

Qy      63 DQIFQNLK 70
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Db      68 DKQTQTPK 75


RESULT  14
US-08-615-232A-5
; Sequence 5, Application US/08615232A
; Patent No. 5993814
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;  GENERAL INFORMATION:
;    APPLICANT:  WILLIAMS, TIMOTHY J.
;    APPLICANT:  JOSE, PETER J.
;    APPLICANT:  GRIFFITHS-JOHNSON, DAVID A.
;    APPLICANT:  HSUAN, JOHN J.
;    TITLE OF INVENTION:  CHEMOTACTIC CYTOKINE
;    NUMBER OF SEQUENCES:  11
;    CORRESPONDENCE ADDRESS:
;      ADDRESSEE:  NIXON & VANDERHYE P.C.
;      STREET:  1100 NORTH GLEBE ROAD, 8TH FLOOR
;      CITY:  ARLINGTON
;      STATE:  VIRGINIA
;      COUNTRY:  U.S.A.
;      ZIP:  22201-4714
;    COMPUTER READABLE FORM:
;      MEDIUM TYPE:  Floppy disk
;      COMPUTER:  IBM PC compatible
;      OPERATING SYSTEM:  PC-DOS/MS-DOS
;      SOFTWARE:  PatentIn Release #1.0, Version #1.25 (EPO)
;    CURRENT APPLICATION DATA:
;      APPLICATION NUMBER:  US/08/615,232A
;      FILING DATE:  13-AUG-1996
;      CLASSIFICATION:  424
;    PRIOR APPLICATION DATA:
;      APPLICATION NUMBER:  GB 9318984
;      FILING DATE:  14-SEP-1993
;      APPLICATION NUMBER:  GB 9408602
;      FILING DATE:  29-APR-1994
;    ATTORNEY/AGENT INFORMATION:
;      NAME:  WILSON, MARY J.
;      REGISTRATION NUMBER:  32,955
;      REFERENCE/DOCKET NUMBER:  550-32
;    TELECOMMUNICATION INFORMATION:
;      TELEPHONE:  (703) 816-4000
;      TELEFAX:  (703) 816-4100
;  INFORMATION FOR SEQ ID NO:  5:
;    SEQUENCE CHARACTERISTICS:
;      LENGTH:  76 amino acids
;      TYPE:  amino acid
;      STRANDEDNESS:  single
;      TOPOLOGY:  linear
;    MOLECULE TYPE:  peptide
US-08-615-232A-5


  Query Match             64.4%;  Score 246;  DB 2;  Length 76;
  Best Local Similarity   64.7%;  Pred. No. 2e-25;
  Matches   44;  Conservative   10;  Mismatches   14;  Indels    0;  Gaps    0;

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Db       8 PVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADPKQKWVQDSMDHL 67

Qy      63 DQIFQNLK 70
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Db      68 DKQTQTPK 75


RESULT  15
US-08-470-323-5
; Sequence 5, Application US/08470323A
; Patent No. 6031080
; GENERAL INFORMATION:
;  APPLICANT: WILLIAMS, TIMOTHY J.
;  APPLICANT: JOSE, PETER J.
;  APPLICANT: GRIFFITHS-JOHNSON, DAVID A.
;  APPLICANT: HSUAN, JOHN J.
;  TITLE OF INVENTION: CHEMOTACTIC CYTOKINE
;  FILE REFERENCE: 550-33
;  CURRENT APPLICATION NUMBER: US/08/470,323A
;  CURRENT FILING DATE: 1995-06-06
;  EARLIER APPLICATION NUMBER: PCT/GB94/02006
;  EARLIER FILING DATE: 1994-09-14
;  EARLIER APPLICATION NUMBER: GB 9318984.3
;  EARLIER FILING DATE: 1993-09-14
;  EARLIER APPLICATION NUMBER: GB 94086902.2
;  EARLIER FILING DATE: 1994-04-29
;  NUMBER OF SEQ ID NOS: 11
; SEQ ID NO 5
;   LENGTH: 76
;   TYPE: PRT
;   ORGANISM: human
US-08-470-323-5


  Query Match             64.4%;  Score 246;  DB 3;  Length 76;
  Best Local Similarity   64.7%;  Pred. No. 2e-25;
  Matches   44;  Conservative   10;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       3 PITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMKHL 62
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Qy      63 DQIFQNLK 70
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Db      68 DKQTQTPK 75


Search completed: May 29, 2001, 13:55:34
Job time: 110 sec
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GenCore version 4.5

OM protein - protein search, using sw model

Run on: May 29, 2001, 13:54:05 ; Search time 21.3 Seconds
(without alignments)
229.076 Million cell updates/sec

Title: US-09-537-859-3
Perfect score: 382
Sequence: 1 SIPITCCFNVINRKIPIQRL.....ERWVRDSMKHLDQIFQNLKP 71

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 198801 seqs, 68722935 residues

[redacted] number of hits satisfying chosen parameters: 198801

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : PIR_67:*
1: pir1:*
2: pir2:*
3: pir3:*
4: pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	378	99.0	99	2	JC5295	monocyte chemotact
2	273	71.5	99	2	JC2417	monocyte chemoattr
3	270	70.7	97	2	JC4912	eotaxin precursor
4	246	64.4	99	2	A60299	monocyte chemoattr
5	237	62.0	99	2	JC2136	monocyte chemoattr
6	233	61.0	109	2	A54678	monocyte chemotact
7	219	57.3	96	2	I48099	eotaxin precursor
8	212	55.5	96	2	JC2478	eotaxin precursor
9	210	55.0	72	2	A55984	monocyte chemotact
10	208	54.5	99	1	A39296	monocyte chemoattr
11	208	54.5	99	2	JC2336	monocyte chemoattr
12	207	54.2	148	1	A30209	PDGF-inducible JE
13	206	53.9	125	2	I46857	monocyte chemoattr
14	196	51.3	148	1	S07723	immediate-early se
15	189.5	49.6	120	2	I48147	monocyte chemoattr
16	172.5	45.2	97	2	A48093	monocytic cytokine
17	149.5	39.1	93	2	B35673	LD78-beta protein
18	142.5	37.3	92	2	A30574	macrophage inflamm
19	138.5	36.3	92	1	A31767	macrophage inflamm
20	136.5	35.7	92	2	I46730	immune activation
21	130.5	34.2	92	2	C30552	macrophage inflamm
22	129	33.8	92	2	I52322	macrophage inflamm
23	128	33.5	92	2	A32393	macrophage inflamm
24	127.5	33.4	114	1	ETHUL	lymphotactin precu
25	121.5	31.8	91	1	A28815	monocyte chemoattr
26	118.5	31.0	114	1	ETMSL	lymphotactin precu
27	116.5	30.5	91	1	A46539	monocyte chemoattr
28	116	30.4	120	2	JE0177	lymphocyte and mon
29	113	29.6	96	2	A37236	I-309 protein prec
30	110	28.8	92	2	S24236	TCA3 protein - mou
31	104	27.2	50	2	C60407	monocyte adherence
32	96	25.1	116	2	I49555	gene C10 protein -
33	85	22.3	101	2	S42496	interleukin 8 - sh
34	85	22.3	101	2	I46997	interleukin-8 - sh
35	85	22.3	103	2	A44253	alveolar macrophag
36	85	22.3	103	2	A53096	interleukin-8 prec
37	79	20.7	95	2	JN0841	interleukin-8 - do
38	77	20.2	101	2	I46871	interleukin-8 - ra
39	75	19.6	99	2	A37034	interleukin-8 prec
40	72	18.8	101	2	I48148	Neutrophil attract
41	71.5	18.7	117	2	B44253	alveolar macrophag
42	71.5	18.7	459	2	T44201	hypothetical prote
43	71.5	18.7	459	2	T44014	tegument pp65/72k,
44	66	17.3	114	2	A55010	neutrophil-activat
45	66	17.3	132	2	A57325	C-X-C chemokine LI

ALIGNMENTS

RESULT 1
JC5295
monocyte chemotactic protein-2 precursor - human
C;Species: Homo sapiens (man)
C;Date: 02-May-1997 #sequence_revision 18-Jul-1997 #text_change 20-Jun-2000
C;Accession: JC5295
R;Van Coillie, E.; Froyen, G.; Nomiyama, H.; Miura, R.; Fiten, P.; Van Aelst, I.; Van
Biochem. Biophys. Res. Commun. 231, 726-730, 1997
A;Title: Human monocyte chemotactic protein-2: cDNA cloning and regulated expression
A;Reference number: JC5295; MUID:97224420
A;Accession: JC5295
A;Molecule type: mRNA
A;Residues: 1-99 <VAN>
A;Cross-references: GB:Y10802; NID:g1924937; PIDN:CAA71760.1; PID:g1924938
A;Experimental source: bone marrow
C;Comment: This protein belongs to the beta-chemokine family which is one of the majo
tis and in tumor biology, and contribute to the trafficking and recuitment of the res
C;Genetics:
A;Gene: mcp-2
C;Superfamily: macrophage inflammatory protein
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-99/Product: monocyte chemotactic protein-2 #status predicted <MAT>

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Best Local Similarity 98.6%; Pred. No. 1.7e-36;
Matches 70; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

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Qy      61 HLDQIFQNLKP 71
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Db      89 HLDQIFQNLKP 99
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RESULT 2
JC2417
monocyte chemoattractant protein-2 precursor - pig
C;Species: Sus scrofa domestica (domestic pig)
C;Date: 24-Feb-1995 #sequence_revision 24-Feb-1995 #text_change 16-Jul-1999
C;Accession: JC2417
R;Hosang, K.; Knoke, I.; Klaudiny, J.; Wempe, F.; Wuttke, W.; Scheit, K.H.
Biochem. Biophys. Res. Commun. 205, 148-153, 1994
A;Title: Porcine luteal cells express monocyte chemoattractant protein-2 (MCP-2): Ana
A;Reference number: JC2417; MUID:95091716
A;Accession: JC2417
A;Molecule type: mRNA
A;Residues: 1-99 <HOS>
A;Cross-references: GB:Z48480; NID:g683718; PIDN:CAA88371.1; PID:g683719
A;Experimental source: corpus luteum

C;Superfamily: macrophage inflammatory protein
F;1-23/Domain: signal sequence #status predicted <SIG>
F;24-99/Product: monocyte chemoattractant protein-2 #status predicted <MAT>

Query Match 71.5%; Score 273; DB 2; Length 99;
Best Local Similarity 70.4%; Pred. No. 2e-24;
Matches 50; Conservative 10; Mismatches 11; Indels 0; Gaps 0;

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Db     29 SIPITCCFGLVNGKIPFKKLESYTRITNSQCPQEAVIFKTKADKEVCADPQQKWVQNSMK 88

Qy     61 HLDQIFQNLKP 71
          |||  |  ||
Db     89 LLDQKSQTPKP 99
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RESULT 3
J[redacted]2
e[redacted]in precursor - human
C;Species: Homo sapiens (man)
C;Date: 01-Nov-1996 #sequence_revision 01-Nov-1996 #text_change 20-Jun-2000
C;Accession: JC4912
R;Bartels, J.; Schlueter, C.; Richter, E.; Noso, N.; Kulke, R.; Christophers, E.; Schroe
Biochem. Biophys. Res. Commun. 225, 1045-1051, 1996
A;Title: Human dermal fibroblasts express eotaxin: Molecular cloning, mRNA expression, a
A;Reference number: JC4912; MUID:96374440
A;Accession: JC4912
A;Status: preliminary
A;Molecule type: mRNA
A;Residues: 1-97 <BAR>
A;Cross-references: EMBL:Z75668; NID:g1531982; PIDN:CAA99997.1; PID:g1531983
A;Experimental source: dermal fibroblast
C;Comment: This protein has eosinophil specific chemotatic activity.
C;Superfamily: macrophage inflammatory protein
C;Keywords: fibroblast
F;1-18/Domain: signal sequence #status predicted <SIG>
F;19-97/Product: eotaxin #status predicted <MAT>

Query Match 70.7%; Score 270; DB 2; Length 97;
Best Local Similarity 67.6%; Pred. No. 4.4e-24;
Matches 48; Conservative 12; Mismatches 11; Indels 0; Gaps 0;

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Db     27 SVPTTCCFNLANRKIPLQRLESYRRITSGKCPQKAVIFKTKLAKDICADPKKRWVQDSMK 86

Qy     61 HLDQIFQNLKP 71
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Db     87 YLDQKSPTPKP 97
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RESULT 4
A60299
monocyte chemoattractant protein 1 precursor - human
N;Alternate names: GDCF-1; glioma-derived monocyte chemotactic factor 1; MCAF; MCP-1; mc
N;Contains: glioma-derived chemotactic factor 2 (GDCF-2)
C;Species: Homo sapiens (man)
C;Date: 20-Feb-1993 #sequence_revision 20-Feb-1993 #text_change 16-Jul-1999
C;Accession: A35474; A33476; S03339; I51841; A60299; A32300; A32396; A34561; I57488; JC1
R;Shyy, Y.J.; Li, Y.S.; Kolattukudy, P.E.
Biochem. Biophys. Res. Commun. 169, 346-351, 1990
A;Title: Structure of human monocyte chemotactic protein gene and its regulation by TPA.
A;Reference number: A35474; MUID:90290466
A;Accession: A35474
A;Molecule type: DNA
A;Residues: 1-99 <SHY>
A;Cross-references: GB:M37719; NID:g187447; PIDN:AAA18102.1; PID:g487124
R;Rollins, B.J.; Stier, P.; Ernst, T.; Wong, G.G.
Mol. Cell. Biol. 9, 4687-4695, 1989
A;Title: The human homolog of the JE gene encodes a monocyte secretory protein.
A;Reference number: A33476; MUID:90097880
A;Accession: A33476
A;Molecule type: mRNA
A;Residues: 1-99 <ROL>
A;Cross-references: GB:M30816; GB:M31625; GB:M31626; NID:g188701; PIDN:AAA36330.1; PI
R;Yoshimura, T.; Yuhki, N.; Moore, S.K.; Appella, E.; Lerman, M.I.; Leonard, E.J.
FEBS Lett. 244, 487-493, 1989
A;Title: Human monocyte chemoattractant protein-1 (MCP-1). Full-length cDNA cloning,
.
A;Reference number: S03339; MUID:89153605
A;Accession: S03339
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-99 <YOS>
A;Cross-references: GB:X14768; NID:g34513; PIDN:CAA32876.1; PID:g34514
A;Experimental source: glioma cell line U-105MG
R;Yoshimura, T.; Leonard, E.J.
Adv. Exp. Med. Biol. 305, 47-56, 1991
A;Title: Human monocyte chemoattractant protein-1 (MCP-1).
A;Reference number: I51841; MUID:92095166
A;Accession: I51841
A;Status: preliminary; translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-99 <YO2>
A;Cross-references: GB:S71513; NID:g240867; PIDN:AAB20651.1; PID:g240868
R;Bottazzi, B.; Colotta, F.; Sica, A.; Nobili, N.; Mantovani, A.
Int. J. Cancer 45, 795-797, 1990
A;Title: A chemoattractant expressed in human sarcoma cells (tumor-derived chemotacti
-1/MCAF).
A;Reference number: A60299; MUID:90216082
A;Accession: A60299
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-99 <BOT>
R;Furutani, Y.; Nomura, H.; Notake, M.; Oyamada, Y.; Fukui, T.; Yamada, M.; Larsen, C
Biochem. Biophys. Res. Commun. 159, 249-255, 1989
A;Title: Cloning and sequencing of the cDNA for human monocyte chemotactic and activa
A;Reference number: A32300; MUID:89165862
A;Accession: A32300
A;Status: not compared with conceptual translation
A;Molecule type: mRNA
A;Residues: 1-99 <FUR>
A;Cross-references: GB:M24545; NID:g187434; PIDN:AAA18164.1; PID:g307163
R;Robinson, E.A.; Yoshimura, T.; Leonard, E.J.; Tanaka, S.; Griffin, P.R.; Shabanowit
Proc. Natl. Acad. Sci. U.S.A. 86, 1850-1854, 1989
A;Title: Complete amino acid sequence of a human monocyte chemoattractant, a putative
A;Reference number: A32396; MUID:89184525
A;Accession: A32396
A;Molecule type: protein
A;Residues: 'X',25-99 <ROB>
R;Decock, B.; Conings, R.; Lenaerts, J.P.; Billiau, A.; Van Damme, J.
Biochem. Biophys. Res. Commun. 167, 904-909, 1990
A;Title: Identification of the monocyte chemotactic protein from human osteosarcoma c
A;Reference number: A34561; MUID:90211336
A;Accession: A34561
A;Molecule type: protein
A;Residues: 29-33,'XX',36-52;82-92 <DEC>
R;Li, Y.S.; Shyy, Y.J.; Wright, J.G.; Valente, A.J.; Cornhill, J.F.; Kolattukudy, P.E
Mol. Cell. Biochem. 126, 61-68, 1993
A;Title: The expression of monocyte chemotactic protein (MCP-1) in human vascular end
A;Reference number: I57488; MUID:94150478
A;Accession: I57488
A;Status: translated from GB/EMBL/DDBJ
A;Molecule type: mRNA
A;Residues: 1-99 <LIY>
A;Cross-references: GB:S69738; NID:g545464; PIDN:AAB29926.1; PID:g545465
R;Ye, Q.N.; Su, G.F.; Yuan, Y.; Huang, C.F.
Chinese J. Microbiol. Immunol. 14, 29-32, 1994
A;Title: The PCR, cloning and sequencing of human monocyte chemoattractant protein-1
A;Reference number: JC1096
A;Accession: JC1096
A;Molecule type: mRNA
A;Residues: 24-28,'Q',30-99 <YEQ>

GenCore version 4.5

OM protein - protein search, using sw model

Run on: May 29, 2001, 13:55:35 ; Search time 13.82 Seconds
(without alignments)
175.987 Million cell updates/sec

Title: US-09-537-859-3
Perfect score: 382
Sequence: 1 SIPITCCFNVINRKIPIQRL.....ERWVRDSMKHLDQIFQNLKP 71

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 93435 seqs, 34255486 residues

number of hits satisfying chosen parameters: 93435

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SwissProt_39:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	382	100.0	99	1	SY08_HUMAN	P80075 homo sapien
2	273	71.5	99	1	SY08_PIG	P49873 sus scrofa
3	267	69.9	97	1	EOTA_HUMAN	P51671 homo sapien
4	255	66.8	99	1	SY08_BOVIN	Q09141 bos taurus
5	246	64.4	99	1	SY02_HUMAN	P13500 homo sapien
6	239	62.6	101	1	SY02_CANFA	P52203 canis famil
7	237	62.0	99	1	SY02_PIG	P42831 sus scrofa
8	237	62.0	104	1	SY12_MOUSE	Q62401 mus musculu
9	235	61.5	97	1	EOTA_RAT	P97545 rattus norv
10	233	61.0	99	1	SY07_HUMAN	P80098 homo sapien
11	230	60.2	74	1	MCPB_BOVIN	P80343 bos taurus
12	229	59.9	97	1	EOTA_MOUSE	P48298 mus musculu
13	219	57.3	96	1	EOTA_CAVPO	P80325 cavia porce
14	215.5	56.4	98	1	SY13_HUMAN	Q99616 homo sapien
15	208	54.5	99	1	MCPA_BOVIN	P28291 bos taurus
16	207	54.2	148	1	SY02_MOUSE	P10148 mus musculu
17	206	53.9	125	1	SY02_RABIT	P28292 oryctolagus
18	196	51.3	148	1	SY02_RAT	P14844 rattus norv
19	189.5	49.6	120	1	SY02_CAVPO	Q08782 cavia porce
20	177.5	46.5	97	1	SY07_MOUSE	Q03366 mus musculu
21	175.5	45.9	97	1	SY07_RAT	Q9qxy8 rattus norv
22	155.5	40.7	90	1	SY04_CHICK	Q90826 gallus gall
23	151	39.5	119	1	SY24_HUMAN	O00175 homo sapien
24	149.5	39.1	93	1	SY14_HUMAN	Q16627 homo sapien
25	149.5	39.1	93	1	SY3L_HUMAN	P16619 homo sapien
26	142.5	37.3	92	1	SY03_HUMAN	P10147 homo sapien
27	138.5	36.3	92	1	SY04_HUMAN	P13236 h small ind
28	136.5	35.7	92	1	SY04_RABIT	P46632 oryctolagus
29	132.5	34.7	392	1	SYD1_RAT	O55145 rattus norv
30	131.5	34.4	92	1	SY04_RAT	P50230 rattus norv
31	131.5	34.4	397	1	SYD1_HUMAN	P78423 homo sapien
32	130.5	34.2	92	1	SY04_MOUSE	P14097 mus musculu
33	129	33.8	92	1	SY03_RAT	P50229 rattus norv
34	128	33.5	92	1	SY03_MOUSE	P10855 mus musculu
35	127.5	33.4	94	1	SY26_HUMAN	Q9y258 homo sapien
36	127.5	33.4	114	1	SYC1_HUMAN	P47992 homo sapien
37	127.5	33.4	114	1	SYC2_HUMAN	Q9ubd3 homo sapien
38	125.5	32.9	395	1	SYD1_MOUSE	O35188 mus musculu
39	124.5	32.6	91	1	SY05_CAVPO	P97272 cavia porce
40	123.5	32.3	89	1	SY18_HUMAN	P55774 h small ind
41	123.5	32.3	113	1	SY15_HUMAN	Q16663 homo sapien
42	122.5	32.1	120	1	SY23_HUMAN	P55773 homo sapien
43	121.5	31.8	91	1	SY05_BOVIN	O97919 bos taurus
44	121.5	31.8	91	1	SY05_HUMAN	P13501 homo sapien
45	121.5	31.8	134	1	SY21_HUMAN	O00585 homo sapien

ALIGNMENTS

```
RESULT   1
SY08_HUMAN
ID   SY08_HUMAN     STANDARD;      PRT;    99 AA.
AC   P80075; P78388;
DT   01-DEC-1992 (Rel. 24, Created)
DT   01-NOV-1997 (Rel. 35, Last sequence update)
DT   01-OCT-2000 (Rel. 40, Last annotation update)
DE   SMALL INDUCIBLE CYTOKINE A8 PRECURSOR (MONOCYTE CHEMOTACTIC PROTEIN 2)
DE   (MCP-2) (MONOCYTE CHEMOATTRACTANT PROTEIN 2) (HC14).
GN   SCYA8 OR SCYA10 OR MCP2.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A., AND VARIANT GLN-69.
RX   MEDLINE=97237052; PubMed=9119400;
RA   van Coillie E., Fiten P., Nomiyama H., Sakaki Y., Miura R., Yoshie O.,
RA   van Damme J., Opdenakker G.;
RT   "The human MCP-2 gene (SCYA8): cloning, sequence analysis, tissue
RT   expression, and assignment to the CC chemokine gene contig on
RT   chromosome 17q11.2.";
RL   Genomics 40:323-331(1997).
RN   [2]
RP   SEQUENCE FROM N.A., AND VARIANT GLN-69.
RC   TISSUE=Bone marrow;
RX   MEDLINE=97224420; PubMed=9070881;
RA   van Coillie E., Froyen F., Nomiyama H., Miura R., Fiten P.,
RA   van Aelst I., van Damme J., Opdenakker G.;
RT   "Human monocyte chemotactic protein-2: cDNA cloning and regulated
RT   expression of mRNA in mesenchymal cells.";
RL   Biochem. Biophys. Res. Commun. 231:726-730(1997).
RN   [3]
RP   SEQUENCE OF 23-99 FROM N.A.
RX   MEDLINE=91207938; PubMed=2518726;
RA   Chang H.C., Hsu F., Freeman G.J., Griffin J.D., Reinherz E.L.;
RT   "Cloning and expression of a gamma-interferon-inducible gene in
RT   monocytes: a new member of a cytokine gene family.";
RL   Int. Immunol. 1:388-399(1989).
RN   [4]
RP   SEQUENCE OF 26-99.
RC   TISSUE=Osteosarcoma;
RX   MEDLINE=92308855; PubMed=1613466;
RA   van Damme J., Proost P., Lenaerts J.-P., Opdenakker G.;
RT   "Structural and functional identification of two human, tumor-derived
RT   monocyte chemotactic proteins (MCP-2 and MCP-3) belonging to the
RT   chemokine family.";
RL   J. Exp. Med. 176:59-65(1992).
RN   [5]
RP   SUBUNIT.
RX   MEDLINE=97053697; PubMed=8898111;
RA   Kim K.-S., Rajarathnam K., Clark-Lewis I., Sykes B.D.;
RT   "Structural characterization of a monomeric chemokine: monocyte
RT   chemoattractant protein-3.";
RL   FEBS Lett. 395:277-282(1996).
CC   -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES, LYMPHOCYTES,
```

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CC       BASOPHILS AND EOSINOPHILS. MAY PLAY A ROLE IN NEOPLASIA AND
CC       INFLAMMATORY HOST RESPONSES. THIS PROTEIN CAN BIND HEPARIN.
CC   -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM.
CC   -!- TISSUE SPECIFICITY: HIGHEST EXPRESSION FOUND IN THE SMALL
CC       INTESTINE AND PERIPHERAL BLOOD CELLS. INTERMEDIATE LEVELS SEEN IN
CC       THE HEART, PLACENTA, LUNG, SKELETAL MUSCLE, THYMUS, COLON, OVARY,
CC       SPINAL CORD AND PANCREAS. LOW LEVELS SEEN IN THE BRAIN, LIVER,
CC       SPLEEN AND PROSTATE.
CC   -!- INDUCTION: BY INTERFERON GAMMA, MITOGENS AND INTERLEUKIN-1.
CC   -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC       C-C) (CHEMOKINE CC).
CC   ----------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; X99886; CAA68168.1; ALT_INIT.
DR   EMBL; Y10802; CAA71760.1; -.
DR   EMBL; Y16645; CAA76341.1; -.
DR   HSSP; P13500; 1DOL.
DR   MIM; 602283; -.
DR   InterPro; IPR000827; -.
DR   InterPro; IPR001811; -.
DR   Pfam; PF00048; IL8; 1.
DR   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW   Cytokine; Chemotaxis; Signal; Heparin-binding; Inflammatory response;
KW   Polymorphism.
FT   SIGNAL       1     23       PROBABLE.
FT   CHAIN       24     99       SMALL INDUCIBLE CYTOKINE A8.
FT   MOD_RES     24     24       PYRROLIDONE CARBOXYLIC ACID.
FT   DISULFID    34     59       BY SIMILARITY.
FT   DISULFID    35     75       BY SIMILARITY.
FT   VARIANT     69     69       K -> Q.
FT                               /FTId=VAR_001633.
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  Query Match             100.0%;  Score 382;  DB 1;  Length 99;
  Best Local Similarity   100.0%;  Pred. No. 5.3e-38;
  Matches   71;  Conservative    0;  Mismatches    0;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
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Db      29 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 88

Qy      61 HLDQIFQNLKP 71
           ||||||||||||
Db      89 HLDQIFQNLKP 99


RESULT   2
SY08_PIG
ID   SY08_PIG       STANDARD;      PRT;    99 AA.
AC   P49873;
DT   01-OCT-1996 (Rel. 34, Created)
DT   01-OCT-1996 (Rel. 34, Last sequence update)
DT   15-JUL-1999 (Rel. 38, Last annotation update)
DE   SMALL INDUCIBLE CYTOKINE A8 PRECURSOR (MONOCYTE CHEMOTACTIC PROTEIN 2)
DE   (MCP-2) (MONOCYTE CHEMOATTRACTANT PROTEIN 2).
GN   SCYA8 OR MCP2.
OS   Sus scrofa (Pig).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
OX   NCBI_TaxID=9823;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=95091716; PubMed=7999015;
RA   Hosang K.K., Knoke I.I., Klaudiny J.J., Wempe F.F., Wuttke W.W.,
RA   Scheit K.K.;
RT   "Porcine luteal cells express monocyte chemoattractant protein-2
RT   (MCP-2): analysis by cDNA cloning and northern analysis.";
RL   Biochem. Biophys. Res. Commun. 205:148-153(1994).
CC   -!- FUNCTION: CHEMOTACTIC FACTOR THAT ATTRACTS MONOCYTES. THIS PROTEIN
CC       CAN BIND HEPARIN.
CC   -!- SUBUNIT: MONOMER OR HOMODIMER; IN EQUILIBRIUM (BY SIMILARITY).
CC   -!- SIMILARITY: BELONGS TO THE INTERCRINE BETA FAMILY (SMALL CYTOKINE
CC       C-C) (CHEMOKINE CC).
CC   ----------------------------------------------------------------------
CC   This SWISS-PROT entry is copyright. It is produced through a collaboration
CC   between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC   the European Bioinformatics Institute. There are no restrictions on its
CC   use by non-profit institutions as long as its content is in no way
CC   modified and this statement is not removed. Usage by and for commercial
CC   entities requires a license agreement (See http://www.isb-sib.ch/announce/
CC   or send an email to license@isb-sib.ch).
CC   ----------------------------------------------------------------------
DR   EMBL; Z48480; CAA88371.1; -.
DR   HSSP; P80098; 1NCV.
DR   InterPro; IPR000827; -.
DR   InterPro; IPR001811; -.
DR   Pfam; PF00048; IL8; 1.
DR   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW   Cytokine; Chemotaxis; Signal; Heparin-binding; Inflammatory response.
FT   SIGNAL       1     23       BY SIMILARITY.
FT   CHAIN       24     99       SMALL INDUCIBLE CYTOKINE A8.
FT   MOD_RES     24     24       PYRROLIDONE CARBOXYLIC ACID (BY
FT                               SIMILARITY).
FT   DISULFID    34     59       BY SIMILARITY.
FT   DISULFID    35     75       BY SIMILARITY.
SQ   SEQUENCE   99 AA;  10903 MW;  D3DAA0F7A964CDB1 CRC64;


  Query Match             71.5%;  Score 273;  DB 1;  Length 99;
  Best Local Similarity   70.4%;  Pred. No. 2.8e-25;
  Matches   50;  Conservative   10;  Mismatches   11;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           |||||||| ::| ||| ::|||||||||| |||:||||||||  |||||||:::||::|||
Db      29 SIPITCCFGLVNGKIPFKKLESYTRITNSQCPQEAVIFKTKADKEVCADPQQKWVQNSMK 88

Qy      61 HLDQIFQNLKP 71
              |||  |  ||
Db      89 LLDQKSQTPKP 99


RESULT   3
EOTA_HUMAN
ID   EOTA_HUMAN     STANDARD;      PRT;    97 AA.
AC   P51671; P50877; Q92490; Q92491;
DT   01-OCT-1996 (Rel. 34, Created)
DT   01-OCT-1996 (Rel. 34, Last sequence update)
DT   01-OCT-2000 (Rel. 40, Last annotation update)
DE   EOTAXIN PRECURSOR (EOSINOPHIL CHEMOTACTIC PROTEIN).
GN   SCYA11.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=96181758; PubMed=8597956;
RA   Garcia-Zepeda E.A., Rothenberg M.E., Ownbey T.R., Leder P.,
RA   Luster A.D.;
RT   "Human eotaxin is a specific chemoattractant for eosinophil cells and
RT   provides a new mechanism to explain tissue eosinophilia.";
RL   Nat. Med. 2:449-456(1996).
RN   [2]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=96189937; PubMed=8609214;
RA   Ponath P.D., Qin S., Ringler D.J., Clark-Lewis I., Wang J., Kassam N.,
RA   Smith H., Shi X., Gonzalo J.A., Newman W., Gutierrez-Ramos J.C.,
RA   Mackay C.R.;
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GenCore version 4.5

OM protein - protein search, using sw model

Run on: May 29, 2001, 13:55:15 ; Search time 32.45 Seconds
(without alignments)
256.449 Million cell updates/sec

Title: US-09-537-859-3
Perfect score: 382
Sequence: 1 SIPITCCFNVINRKIPIQRL.....ERWVRDSMKHLDQIFQNLKP 71

Scoring table: BLOSUM62
Gapop 10.0 , Gapext 0.5

Searched: 374700 seqs, 117207915 residues

number of hits satisfying chosen parameters: 374700

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : SPTREMBL_15:*
1: sp_archea:*
2: sp_bacteria:*
3: sp_fungi:*
4: sp_human:*
5: sp_invertebrate:*
6: sp_mammal:*
7: sp_mhc:*
8: sp_organelle:*
9: sp_phage:*
10: sp_plant:*
11: sp_rodent:*
12: sp_unclassified:*
13: sp_vertebrate:*
14: sp_virus:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	% Query Match	Length	DB	ID	Description
1	255	66.8	99	6	Q9MYN4	Q9myn4 macaca fasc
2	243	63.6	76	4	Q9UDF3	Q9udf3 homo sapien
3	234	61.3	95	11	Q9QYD6	Q9qyd6 mus musculu
4	233	61.0	100	6	Q9TTQ4	Q9ttq4 equus cabal
5	224	58.6	97	6	Q9TTS6	Q9tts6 bos taurus
6	220	57.6	97	11	Q9Z121	Q9z121 mus musculu
7	219	57.3	99	6	Q9TTQ3	Q9ttq3 equus cabal
8	218	57.1	81	6	Q9TTQ2	Q9ttq2 equus cabal
9	211.5	55.4	79	4	O95689	O95689 homo sapien
10	207	54.2	148	11	Q9QYD7	Q9qyd7 mus musculu
11	206.5	54.1	97	11	Q9Z318	Q9z318 cavia porce
12	173	45.3	62	4	O95690	O95690 homo sapien
13	170	44.5	106	11	Q9Z292	Q9z292 cricetulus
14	164.5	43.1	75	6	Q9TTQ1	Q9ttq1 equus cabal
15	153.5	40.2	90	13	Q9PWA6	Q9pwa6 gallus gall
16	151	39.5	119	11	Q9JKC0	Q9jkc0 mus musculu
17	146.5	38.4	80	4	Q14745	Q14745 homo sapien
18	135.5	35.5	95	14	Q98158	Q98158 kaposi's sa
19	127.5	33.4	114	4	Q9UBD3	Q9ubd3 homo sapien
20	126.5	33.1	93	11	Q9WUZ6	Q9wuz6 mus musculu
21	126.5	33.1	131	11	Q9R043	Q9r043 mus musculu
22	123.5	32.3	113	4	Q9UM74	Q9um74 homo sapien
23	121.5	31.8	91	4	Q9NYA2	Q9nya2 homo sapien
24	119	31.2	89	13	Q9I8E0	Q9i8e0 gallus gall
25	107.5	28.1	97	13	O57411	O57411 gallus gall
26	104.5	27.4	101	13	O93238	O93238 cyprinus ca
27	101.5	26.6	100	13	Q9PT05	Q9pt05 oncorhynchu
28	100.5	26.3	115	14	Q9WRT7	Q9wrt7 macaca mula
29	100.5	26.3	118	14	Q9J2M1	Q9j2m1 macaca mula
30	99.5	26.0	100	13	Q9PT03	Q9pt03 oncorhynchu
31	97.5	25.5	100	13	Q9W691	Q9w691 oncorhynchu
32	97.5	25.5	100	13	Q9PT07	Q9pt07 oncorhynchu
33	97.5	25.5	100	13	Q9PT06	Q9pt06 oncorhynchu
34	96.5	25.3	100	13	Q9PTS4	Q9pts4 oncorhynchu
35	91.5	24.0	100	13	Q9PTS3	Q9pts3 salmo trutt
36	91.5	24.0	100	13	Q9PT04	Q9pt04 oncorhynchu
37	88.5	23.2	92	11	Q9QZU2	Q9qzu2 mus musculu
38	88	23.0	93	13	Q9PTF8	Q9ptf8 brachydanio
39	87	22.8	76	11	Q9QUR9	Q9qur9 mus musculu
40	85.5	22.4	134	14	Q9YVA9	Q9yva9 gallid herp
41	85.5	22.4	142	14	Q9IBJ7	Q9ibj7 turkey herp
42	85.5	22.4	203	14	Q67634	Q67634 gallid herp
43	83	21.7	120	14	Q9J5A6	Q9j5a6 fowlpox vir
44	82.5	21.6	81	11	Q9QZU1	Q9qzu1 rattus norv
45	81	21.2	101	6	Q9XSX5	Q9xsx5 felis silve

ALIGNMENTS

RESULT 1
Q9MYN4
ID Q9MYN4 PRELIMINARY; PRT; 99 AA.
AC Q9MYN4;
DT 01-OCT-2000 (TrEMBLrel. 15, Created)
DT 01-OCT-2000 (TrEMBLrel. 15, Last sequence update)
DT 01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE MONOCYTE CHEMOATTRACTANT PROTEIN-1.
GN MCP-1.
OS Macaca fascicularis (Crab eating macaque) (Cynomolgus monkey), and
OS Macaca mulatta (Rhesus macaque).
OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Mammalia; Eutheria; Primates; Catarrhini; Cercopithecidae;
OC Cercopithecinae; Macaca.
OX NCBI_TaxID=9541, 9544;
RN [1]
RP SEQUENCE FROM N.A.
RC SPECIES=M.fascicularis;
RA Studer C., Urfer R.;
RT "Cloning and expression of cynomolgus monkey chemoattractant protein-
RT 1.";
RL Submitted (JUN-2000) to the EMBL/GenBank/DDBJ databases.
RN [2]
RP SEQUENCE FROM N.A.
RC SPECIES=M.mulatta;
RA Studer C., Urfer R.;
RT "Cloning and expression of rhesus monkey monocyte chemoattractant
RT protein-1.";
RL Submitted (APR-2000) to the EMBL/GenBank/DDBJ databases.
DR EMBL; AF276081; AAF81899.1; -.
DR EMBL; AF255343; AAF67756.1; -.
SQ SEQUENCE 99 AA; 11007 MW; 433CB88C64EE7A4F CRC64;

Query Match 66.8%; Score 255; DB 6; Length 99;
Best Local Similarity 65.2%; Pred. No. 1.1e-21;
Matches 45; Conservative 10; Mismatches 14; Indels 0; Gaps 0;

Qy 3 PITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMKHL 62
Db 31 PVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICADPKQKWVQDSMDHL 90

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Qy      63 DQIFQNLKP 71
           |:  |  ||
Db      91 DKQIQTPKP 99


RESULT   2
Q9UDF3
ID   Q9UDF3      PRELIMINARY;      PRT;    76 AA.
AC   Q9UDF3;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE   SMALL INDUCIBLE CYTOKINE A2, MCP-1/JE.
OS   Homo sapiens (Human).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
OX   NCBI_TaxID=9606;
RN   [1]
RP   SEQUENCE FROM N.A.
RX   MEDLINE=91301709; PubMed=2071154;
RA   Rollins B.J., Morton C.C., Ledbetter D.H., Eddy R.L.Jr., Shows T.B.;
RT   "Assignment of the human small inducible cytokine A2 gene, SCYA2
RT   (encoding JE or MCP-1), to 17q11.2-12: evolutionary relatedness of
RT   cytokines clustered at the same locus.";
RL   Genomics 10:489-492(1991).
DR   HSSP; P13500; 1DOM.
DR   INTERPRO; IPR000827; -.
DR   INTERPRO; IPR001811; -.
DR   PFAM; PF00048; IL8; 1.
DR   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SQ   SEQUENCE   76 AA;  8701 MW;  15D1ECAD82BCF075 CRC64;


  Query Match             63.6%;  Score 243;  DB 4;  Length 76;
  Best Local Similarity   63.2%;  Pred. No. 1.8e-20;
  Matches   43;  Conservative   11;  Mismatches   14;  Indels    0;  Gaps    0;

Qy       3 PITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMKHL 62
           |:|||:|  |||| :||| || |||: :||||||||||   ||:|:|||::||:||| ||
Db       8 PVTCCYNFTNRKISVQRLASYRRITSSKCPKEAVIFKTIVAKEICSDPKQKWVQDSMDHL 67

Qy      63 DQIFQNLK 70
           |:  |  |
Db      68 DKQTQTPK 75


RESULT   3
Q9QYD6
ID   Q9QYD6      PRELIMINARY;      PRT;    95 AA.
AC   Q9QYD6;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE   SMALL INDUCIBLE CYTOKINE A12 PRECURSOR.
GN   SCYA12.
OS   Mus musculus (Mouse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
OX   NCBI_TaxID=10090;
RN   [1]
RP   SEQUENCE FROM N.A.
RC   STRAIN=SJL/J; TISSUE=SPLEEN;
RX   MEDLINE=99370037; PubMed=10438970;
RA   Teuscher C., Butterfield R.J., Ma R.Z., Zachary J.F., Doerge R.W.,
RA   Blankenhorn E.P.;
RT   "Sequence polymorphisms in the chemokines Scya1 (TCA-3), Scya2
RT   (monocyte chemoattractant protein (MCP)-1), and Scya12 (MCP-5) are
RT   candidates for eae7, a locus controlling susceptibility to monophasic
RT   remitting/nonrelapsing experimental allergic encephalomyelitis.";
RL   J. Immunol. 163:2262-2266(1999).
DR   EMBL; AF065938; AAF15388.1; -.
DR   HSSP; P13500; 1DOL.
DR   MGD; MGI:108224; Scya12.
DR   INTERPRO; IPR000827; -.
DR   INTERPRO; IPR001811; -.
DR   PFAM; PF00048; IL8; 1.
DR   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
SQ   SEQUENCE   95 AA;  10727 MW;  9DB56B029729D0B0 CRC64;


  Query Match             61.3%;  Score 234;  DB 11;  Length 95;
  Best Local Similarity   59.4%;  Pred. No. 2.4e-19;
  Matches   38;  Conservative   17;  Mismatches    9;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           | |:|||:||: :|| :::|:|| |||: |||:||||||:|   ||:||||||:||::|:
Db      28 STPVTCCYNVVKQKIHVRKLKSYRRITSSQCPREAVIFRTILDKEICADPKEKWVKNSIN 87

Qy      61 HLDQ 64
           |||:
Db      88 HLDK 91


RESULT   4
Q9TTQ4
ID   Q9TTQ4      PRELIMINARY;      PRT;   100 AA.
AC   Q9TTQ4;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE   EOTAXIN PRECURSOR.
OS   Equus caballus (Horse).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Perissodactyla; Equidae; Equus.
OX   NCBI_TaxID=9796;
RN   [1]
RP   SEQUENCE FROM N.A.
RA   Benarafa C., Hamblin A.S., Cunningham F.M., Collins M.E.;
RT   "Cloning Equine CC chemokines.";
RL   Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
DR   EMBL; AJ251188; CAB61624.1; -.
DR   HSSP; P51671; 1EOT.
DR   INTERPRO; IPR000827; -.
DR   INTERPRO; IPR001811; -.
DR   PFAM; PF00048; IL8; 1.
DR   PROSITE; PS00472; SMALL_CYTOKINES_CC; 1.
KW   Signal.
FT   SIGNAL        1     23       POTENTIAL.
FT   CHAIN        24    100       EOTAXIN.
SQ   SEQUENCE   100 AA;  11247 MW;  11F08EC00E75D50B CRC64;


  Query Match             61.0%;  Score 233;  DB 6;  Length 100;
  Best Local Similarity   60.9%;  Pred. No. 3.3e-19;
  Matches   39;  Conservative   16;  Mismatches    9;  Indels    0;  Gaps    0;

Qy       1 SIPITCCFNVINRKIPIQRLESYTRITNIQCPKEAVIFKTKRGKEVCADPKERWVRDSMK 60
           ||   ||||| :|||  |||:|| :||: :||::|||||||: |::||||::||:|:||
Db      27 SISTVCCFNVASRKISFQRLQSYRKITSSKCPQKAVIFKTKQAKKICADPKQKWVQDAMK 86

Qy      61 HLDQ 64
           :||:
Db      87 YLDE 90


RESULT   5
Q9TTS6
ID   Q9TTS6      PRELIMINARY;      PRT;    97 AA.
AC   Q9TTS6;
DT   01-MAY-2000 (TrEMBLrel. 13, Created)
DT   01-MAY-2000 (TrEMBLrel. 13, Last sequence update)
DT   01-OCT-2000 (TrEMBLrel. 15, Last annotation update)
DE   EOTAXIN.
OS   Bos taurus (Bovine).
OC   Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC   Mammalia; Eutheria; Cetartiodactyla; Ruminantia; Pecora; Bovoidea;
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